Florida International University

DO NOT
REMOVE
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ACADEMIC CALENDAR, 1979–80
FLORIDA INTERNATIONAL UNIVERSITY

FALL QUARTER 1979

June 22	Last day for Receipt of Admissions Application for International Students Applying to the Fall Quarter.
July 30–Aug. 3	Official Registration Week for the Fall Quarter
September 3	Labor Day Holiday (University Closed)
September 4	Last Day for Receipt of Applications (Including Appropriate Credentials) for Regular Admissions to Fall Quarter
September 24	Registration Day
September 25	Classes Begin
	Drop and Add Period Begins
October 1	Last Day to Complete Late Registration
	Drop and Add Period Ends
	Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability
	Last Day to Pay Fees Without a $50.00 Late Fee
	Last Day to Pay Fees to Avoid Cancellation of Enrollment
October 15	Last Day to Apply for Fall Quarter Graduation
October 22	Last Day to Reinstate Cancelled Enrollments
November 5	Last Day to Drop a Course with a Grade of DR
	Last Day to Withdraw from the University with a WI Grade
November 5–9	Official Registration Week for the Winter Quarter
November 12	Veterans Day Holiday (University Closed)
November 22, 23	Thanksgiving Holiday (University Closed)
December 14	Classes End
December 15	Official Commencement Exercises
December 25	Christmas Holiday (University Closed)

WINTER QUARTER 1980

November 5–9	Official Registration Week for the Winter Quarter
November 26	Last Day for Receipt of Admissions Application for International Students Applying to the Winter Quarter
December 17	Last Day for Receipt of Applications (Including Appropriate Credentials) for Regular Admissions to Winter Quarter
January 1	New Year Holiday (University Closed)
January 7	Registration Day
January 8	Classes Begin
	Drop and Add Period Begins
January 14	Last Day to Complete Late Registration
	Drop and Add Period Ends
	Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability
	Last Day to Pay Fees Without a $50.00 Late Fee
	Last Day to Pay Fees to Avoid Cancellation of Enrollment
January 28	Last Day to Apply for Winter Quarter Graduation
February 4	Last Day to Reinstate Cancelled Enrollments
February 18–22	Official Registration Week for the Spring Quarter
February 18	Last Day to Drop a Course With a Grade of DR
	Last Day to Withdraw from the University with a WI Grade
March 21	Classes End

1979-80 Catalog

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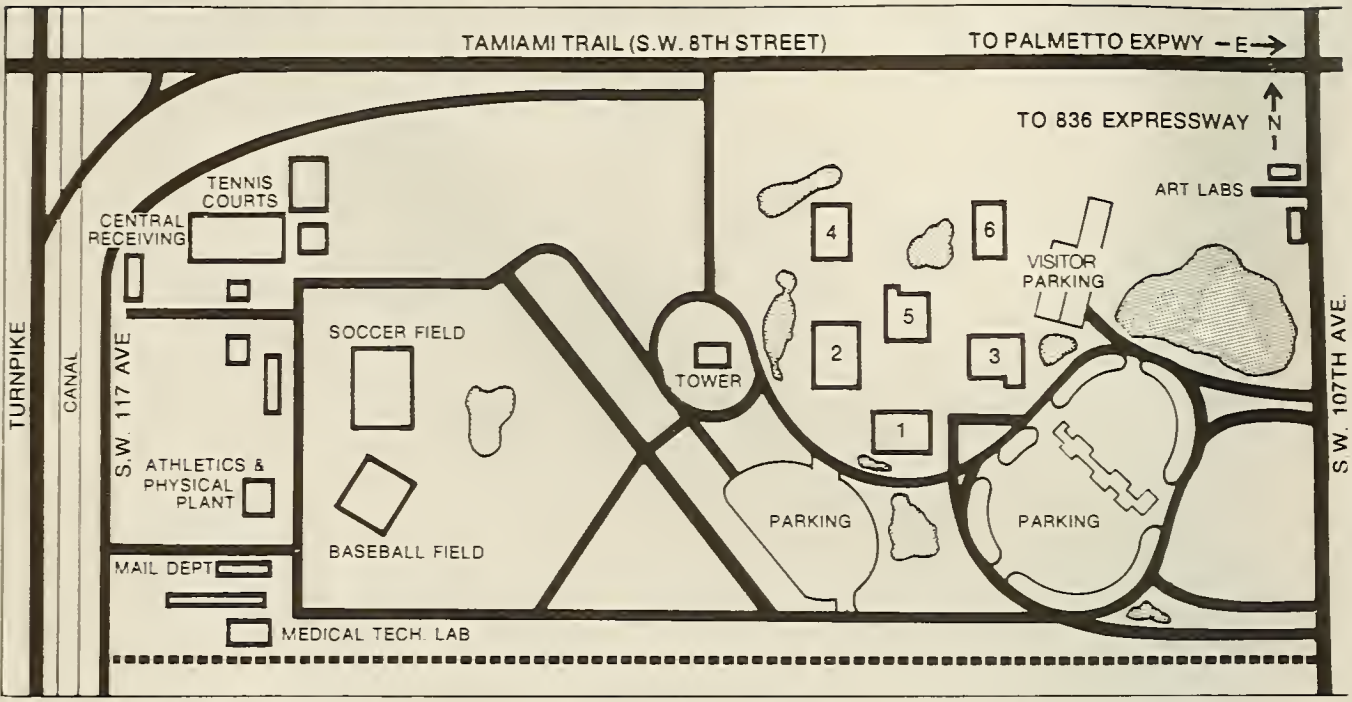
Editor: Sharon Gottlieb
Illustrations: Eleanor Bonner
Photographs: George Valcarce and Michael Upright,
FIU Media Department
Graphic Design by FIU Publications Department

The State University System

Florida International University believes in equal opportunity practices which conform to all laws against discrimination and is committed to non-discrimination with respect to race, color, creed, age, handicap, sex, or national origin. Additionally, the University is committed to the principle of taking the positive steps necessary to achieve the equalization of educational and employment opportunities.

Florida International University — Tamiami Campus



1 PRIMERA CASA (Administrative Offices)

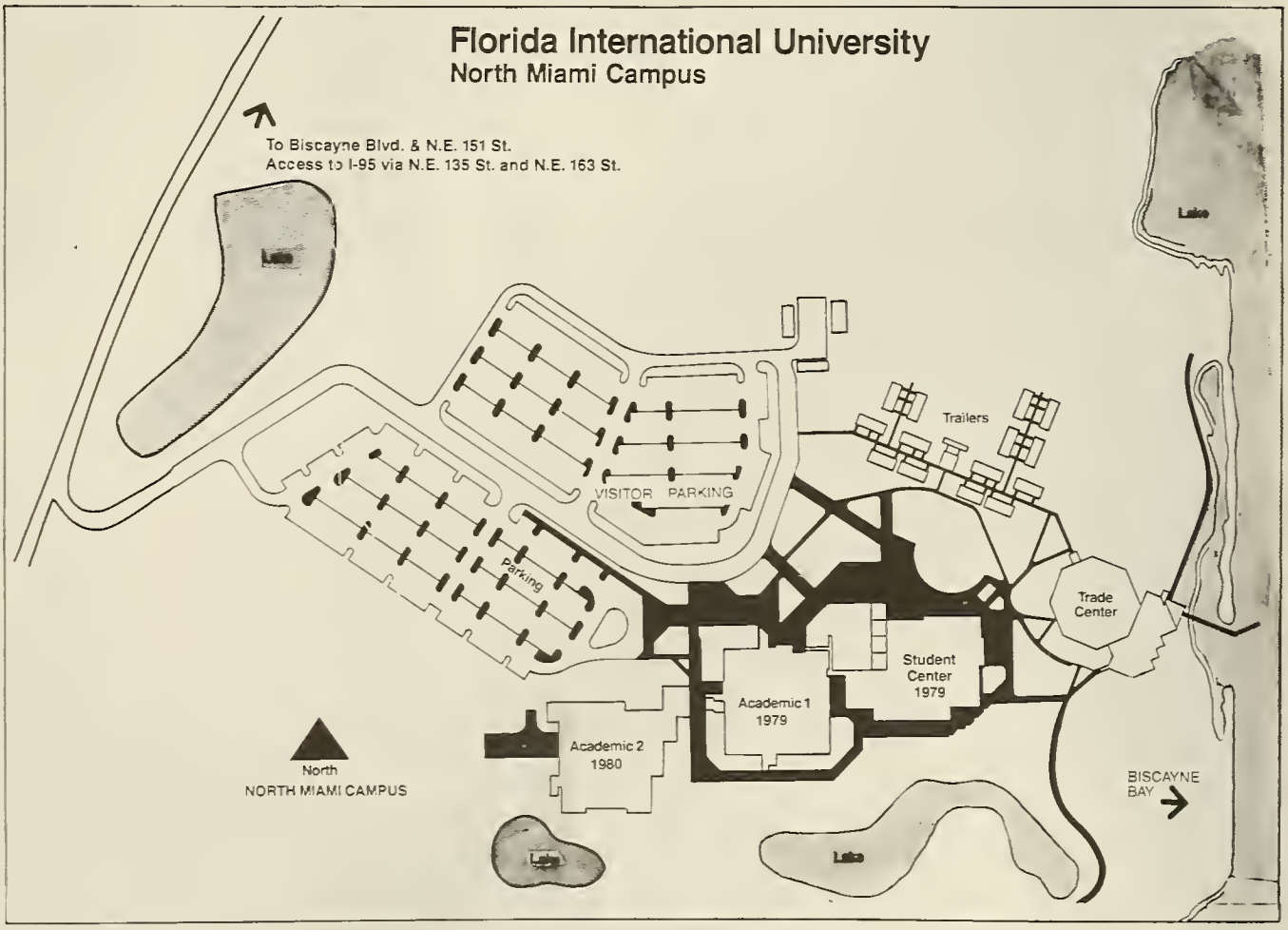
2 DEUXIEME MAISON

3 UNIVERSITY HOUSE (Student Services)

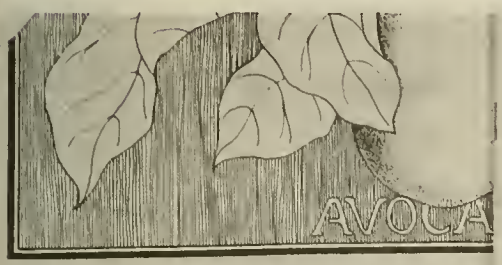
4 VIERTES HAUS

5 ATHENAEUM (Library)

6 OWA EHAN



General Information



Florida International Un
Schedule of Cla
North Miami Campus and Tamiami
Fall Quart
September 25 to December 14
Last Day to Pay Fees is October 1

ANNUAL
FIU STUDENT
EXHIBITION
1979

The Uni
Florida Intern
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There are cur
The Tamiami cam
1972. Is located
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Broward county line
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students.
Both campuses are
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architectural design. As
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lived in Dade or Broward
before coming to FIU ma
graduates of the extensive
community college system
come from around the Uni
and recent statistics show t
than 500 students come fro
foreign countries as diverse
Venezuela, Nigeria, and Pakis
are drawn to Miami in part by
unusual mix of commercial ac
physical beauty, cultural variety
recreational opportunities.
The student body is represe
of that complex mix of ages, s
ethnic groups, nationalities, and
religions which typify urban life
best. Although a commuter sch
FIU has a strong sense of commu
for those willing to get involved

ACADEMIC PROGRAMS
FIU has a wide range of undergraduate
and graduate programs, providing
more than 120 degree programs in the
following schools:
College of Arts and Sciences
School of Business and
Organizational Sciences
School of Education
School of Hospitality Management
School of Public Affairs and Service
School of Technology

Tutti Summer
Individually or in Groups
At all levels
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6699-445
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General Information

State Board of Education

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Gerald Lewis	*Comptroller*
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Ralph D. Turlington	*Commissioner of Education*
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Jack McGriff, *Vice Chairman*	*Gainesville*
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John Goldsmith	*Student Regent*
	University of South Florida
E. T. York, Jr.	*Chancellor,*
	State University System

Florida International University Officials

Gregory Baker Wolfe	*President*
Robert Fisher	*Vice President for Academic Affairs*
Ronald A. Arrowsmith	*Vice President for Administrative Affairs*
Judy M. Merritt	*Vice President for Student Affairs*
Terry Spence	*Dean University Relations*

Goals

Florida International University, a member institution of the State University System of Florida, presently offers upper level and graduate programs designed to achieve three goals:

Education of Students—To provide university education for qualified students which (a) prepares them for useful careers in social service, business, industry, education and the professions; (b) furnishes them with opportunities to become effective members of society; and (c) offers them an appreciation of their relationships to their cultural, aesthetic and technological environments.

Service to the Community—To serve the greater community, with a primary emphasis on serving the Greater Miami and South Florida area, in a manner which enhances the metropolitan area's capability to meet the ecological, cultural, social and urban challenges which it faces.

Greater International Understanding—To become a major international education center with a primary emphasis on creating greater mutual understanding among the Americas and throughout the world.

History

Florida International University was established by the Florida State Legislature on June 22, 1965. Classes began on September 19, 1972, at the Tamiami campus with an initial enrollment of 5,667 undergraduate and graduate students.

Early in 1973, the Inter-American Center Authority deeded a tract of land to the Board of Regents for a second campus of Florida International University. The University's first building on the North Miami campus was completed during 1976.

The Florida Board of Regents appointed the founding president, Charles E. Perry, on July 11, 1969. He was succeeded on June 1, 1976, by former University of West Florida President and Regents Professor Harold Brian Crosby. Gregory Baker Wolfe was named the third president of Florida International University on February 16, 1979. President Wolfe came to the university from the American University in Washington, D.C., where he was Dean and Professor of International Relations. Prior to that he was President of Portland State University in Oregon and had a distinguished international career with the White House and the Department of State in Washington, D.C.

Campuses

The University currently has one major campus location in Southwest Dade County with a second major campus in North Miami.

The Tamiami Campus is located 10 miles west of downtown Miami on the Tamiami Trail (SW Eighth Street) between SW 107 and 117 Avenues. *The North Miami Campus* is located at the northern tip of Biscayne Bay, just east of Biscayne Boulevard between NE 135 and 151 Streets. Both campuses are operated under a central administrative plan.

Building Program Florida International University, Tamiami Campus

The Tamiami Campus is located on a 344 acre site in west central Dade County. Since 1970, six major buildings have been constructed at a cost of $38 million. The campus building plan includes several other structures to accommodate growth needs of 15,000 students.

The campus plan is designed as an interactive complex of facilities connected by internal courts for pedestrian access. The complex is surrounded by a natural buffer of lakes and green areas to provide passive areas for study and relaxation.

Primera Casa, the first major building of the Tamiami Campus, opened in 1972. Its five floors house classrooms, laboratories, computer facilities, and administrative offices.

Deuxieme Maison, the second building, opened early in 1973. The four-story structure houses classrooms, lecture-theatres, academic program and faculty offices.

University House accommodates Student Affairs offices, recreation and lounge areas, cafeteria, a bookstore, an international conference theatre, and a classroom-auditorium seating 200 persons. The building was opened early in 1974.

Viertes Haus, a three-story structure opened early in 1975, houses Technology and Fine Arts laboratories, the experimental theatre, and media production facilities. The central utility plant, which serves the entire campus, was constructed adjacent to Viertes Haus and opened at the same time.

Athenaeum, which houses the Library and the film library of the media center, opened in the Fall of 1975. This structure also includes a divisible auditorium seating 540 persons for lectures or performances.

Owa Ehan, the sixth building, was completed in Fall 1977. This three story structure houses laboratories, faculty offices, classrooms, and specialized facilities for Physical Sciences, Biological Sciences, Health Sciences, and Hospitality Management.

The existing student recreation facilities at the west part of the Tamiami Campus will be expanded in the future, integrated with a teaching gymnasium which will be constructed as resources become available.

(Continued)

Academic Degree Programs

Florida International University, North Miami Campus

Florida International University's North Miami Campus is located on a 106 acre site in North Dade County on Biscayne Bay. The campus development plan includes structures to accommodate growth needs for 15,000 students.

Trade Center Building, the first building on the campus, was purchased from the Inter-American Center Authority and remodeled for University use in 1976. The three-story structure includes the Library, Media Services, Student Affairs, Bookstore, Computer Center, faculty offices, classrooms, and campus administrative offices.

Academic Building One, opened the Fall of 1979, and houses classrooms, faculty offices, Admissions and Registration offices.

Student Affairs Building, scheduled to be completed by winter, 1980, will include Student Activities offices, Cafeteria, Bookstore, Student Affairs offices, recreational space, a large lecture hall, and classrooms.

Academic Building Two, now in planning stages, will be a laboratory/classroom and faculty office complex, including some Science and Technology facilities. This facility will be complete in early 1981.

Future academic buildings, a library building, an auditorium, and a major conference center will be completed as resources become available. Student recreation facilities are being planned, including a Racket Sports Complex which should be complete in late 1980.

General Academic Information

Florida International University offers a variety of academic programs and courses at the bachelor's and master's degree levels, all designed to respond to the changing needs of the growing metropolitan area of Dade County and South Florida. Upper level bachelor's programs and courses are offered in the College of Arts and Sciences and the five professional schools—Business and Organizational Sciences, Education, Public Affairs and Services, Hospitality Management, and Technology. Graduate study at the master's level is available in the Schools of Buisness and Organizational Sciences, Education, Public Affairs and Services, Hospitality Management and Technology.

Note: The programs, policies, requirements and regulations published in this catalog are continually subject to review, in order to serve the needs of the University's various publics and to respond to the mandates of the Florida Board of Regents and the Florida Legislature. Changes in programs, policies, requirements, and regulations may be made without advance notice.

Accreditation and Memberships

All academic programs of Florida International University are approved by the State Board of Education and the Board of Regents of Florida.

The University is an accredited member of the Southern Association of Colleges and Schools. The professional programs of the respective schools of the University are accredited or approved by the appropriate professional associations, or are making satisfactory progress toward full professional accreditation or approval.

The University is also an affiliate member of the Association of Upper Level Colleges and Universities, the American Association of State Colleges and Universities, the Florida Association of Colleges and Universities, the Association of Caribbean Universities and Research Institutes, the American Association of Community and Junior Colleges, the Union of Experimenting Colleges and Universities, a Charter Member of the Southeast Florida Educational Consortium, and numerous other educational and professional associations. The following agencies have accredited professional programs at Florida International University:

The American Dietetics Association
The American Physical Therapy Association
The American Occupational Therapy Association
The American Medical Association
National Accreditation Agency for Clinical Lab Sciences
The American Society of Clinical Pathologists
The American Medical Records Association
The Council on Social Work Education
Engineers Council for Professional Development

Southeast Florida Educational Consortium

Florida International University, Broward Community College, and Miami-Dade Community College are charter members of the Southeast Florida Educational Consortium established in 1977. The organization links the member institutions in planning, maintaining, and evaluating cooperative efforts in academic programs, student services, and administrative support services. The overall objectives of the Consortium are to:

1) Increase and improve educational opportunities.
2) Ensure smooth transition from the community college to the university.
3) Provide easy access to institutional services for students and faculty.
4) Effectively utilize human and fiscal resources.

The Office of the Consortium is located at 11011 S.W. 104 Street, Miami, Florida 33176.

The Consortium is governed by a Steering Committee, has an Executive Director, and currently has 16 committees/task forces: Academic Programs; Admissions, Registration, Records; Academically Underprepared Students; Audio-Visual; Career Planning and Placement; Cooperative Education; Facilities; Financial Aid; Handicapped Students; Institutional Research; Libraries; Physical Plant; Public Information; Student Activities; Superior Students; Veterans Affairs; *Ad Hoc* groups are formed to meet other specific needs.

Descriptions of specific cooperative arrangements between the Consortium campuses—and student/faculty procedures—are given in the appropriate sections of this Catalog.

Academic Programs

Academic Majors Leading to the Bachelor's Degree

College of Arts and Sciences

Anthropology
*Art
*Biological Sciences
*Chemistry
**Computer Science
Earth Sciences
Economics
*English
Environmental Studies
French
Liberal Studies
*Mathematics
*Music
Philosophy
Physics
Political Sciences
**Phychology
Religious Studies
Sociology
*Spanish
Statistics

(Continued)

Academic Degree Programs

*History
**Humanities
**International Relations
Theatre

Note: In accordance with University regulations for two majors or two degrees (see page 00), students in these programs may request admission into the programs of the School of Education leading to teacher certification in the corresponding subject matter areas. To do so, they must obtain the approval of their college major advisor and of the Chairperson of the appropriate department in the School of Education.

***Note:* One of the initial academic major programs to be offered at the North Miami Campus.

School of Business and Organizational Sciences

Accounting
Finance
Insurance
International Business
Management
Management Information Systems
Marketing
Personnel Management
Real Estate
Transportation

School of Education

Adult Education (under development)
Art
Bilingual Education (under development)
Biological Sciences
Business and Office Education
Elementary Education
Emotional Disturbances
English
Health Education
Health Occupation Education
History
Home Economics
Human Relations Education (under development)
Industrial Arts
Intercultural Education (under development)
Mathematics
Mental Retardation
French Education
German
Spanish Education
Music
Physical Education (1–12)
Physical Sciences
Parks and Recreation
Social Studies
Specific Learning Disabilities
Technical Education
Vocational Industrial Education

The approval of the major advisor and of the Chairperson of the appropriate college department must be acquired.

Note: Interdisciplinary programs are offered by the Schools of Education and Technology. With the concurrence of major faculty advisors, a student may elect to pursue a program leading to either two degrees or two majors, in which cases the student must complete the 90 hour requirement for one and an additional 45 hour requirement for the other.

School of Hospitality Management

General Hospitality Management
Hotel-Motel Management
International Hotel Management
Restaurant and Food Service Management
Tourism and Travel Management

School of Public Affairs and Services

Criminal Justice
Health Services Administration
Public Administration
Social Work

School of Technology

Architectural Technology
Civil Engineering Technology
Communications Technology
Construction Engineering Technology
Construction Management
Dietetics and Nutrition
Electrical Engineering Technology
Environmental Urban Systems
Home Ecomomics
Industrial Systems
Interior Design
Mechanical Engineering Technology
Medical Records Administration
Medical Technology
Occupational Therapy
Physical Therapy

Academic Majors Leading to the Master's Degree

College of Arts and Sciences

Biology (offered jointly with FAU)
Chemistry (offered jointly with FAU)
Community Psychology
Environmental and Urban Systems (offered jointly with School of Technology)
Mathematical Sciences
Physics (offered jointly with FAU)
Psychology (offered jointly with FAU)
Psychology (offered jointly with FAU)

School of Business and Organizational Sciences

Business Administration
Management: concentrations in
Accounting (Including Taxation)
Finance
Real Estate
International Business

Note: At the time this catalogue went to press, no final decision had been made as to whether full undergraduate programs, graduate program, or both will be offered at the North Miami Campus. It may be necessary for students to take some or all of their required coursework at the Tamiami Campus.

(Continued)

Academic Degree Programs

School of Education

Curriculum and Instruction: concentrations in
- Early Childhood Education
- Elementary Education
- Reading
- Art
- Science Education
- English
- Adult Education, General
- Health Education
- Home Economics Education
- Industrial Arts
- Intercultural Education (under development)
- Mathematics
- Modern Language Education
- Music
- Physical Education
- Parks and Recreation Administration
- Social Studies
- Technical Education
- TESOL
- Vocational Industrial Education
- Bilingual Education (under development)
- Urban Education (under development)

Psycho-Educational Services: concentrations in
- Emotional Disturbances
- Mental Retardation
- Specific Learning Disabilities
- Counselor Education
- School Psychology

School of Hospitality Management

Hotel and Food Service Management

School of Public Affairs and Services

- Criminal Justice
- Health Services Administration
- Public Administration

School of Technology

Dietetics and Nutrition
Environmental & Urban Systems

Academic Majors Leading to the Doctoral and Specialist Degrees

School of Education

The School of Education with cooperating state universities in Florida.
- Educational Administration and Supervision
- Curriculum and Instruction
- Community College Education (under development)
- Urban Educational Policy and Administration (under development)
- Adult Education (under development)
- Bilingual Education (under development)
- International Development Education (under development)
- School Psychology (under development)
- Technical Vocational Education (under development)
- Special Education (under development)

Academic Degrees

College of Arts and Sciences

Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Music
Bachelor of Science
Master of Science in Community Psychology
Master of Science in Mathematical Sciences

School of Business and Organizational Sciences

Bachelor of Business Administration
Master in Business Administration
Master of International Business
Master of Science in Management

School of Education

Bachelor of Science
Master of Science
Specialist in Education
Doctor of Education

School of Hospitality Management

Bachelor of Science
Master of Science in Hotel and Food Service Management

School of Independent Studies

Bachelor of Arts
Bachelor of Fine Arts
Bachelor of Science
Bachelor of Business Administration
Bachelor of Technology

School of Public Affairs and Services

Bachelor of Science in Criminal Justice
Master of Science in Criminal Justice
Bachelor of Health Services Administration
Master of Health Services Administration
Bachelor of Public Administration
Master of Public Administration
Bachelor of Science in Social Work

School of Technology

Bachelor of Science
Bachelor of Technology
Master of Science

(Continued)

Academic Degree Programs

North Miami Campus Academic Program

The second major campus of the University opened in June 1977. The academic major programs listed below will be offered at the North Miami Campus during the 1979–80 academic year with sufficient courses planned to be scheduled at the North Miami Campus to satisfy full degree requirements. Selected courses from academic majors, other than those listed, and many electives will be offered and may be taken in partial fulfillment of degree requirements. Students are advised to review the quarterly course listing to determine if desired subjects are offered at North Miami.

The degree requirements and other academic rules and regulations apply equally to both campuses of the University. Those interested in programs at either location should consult the requirements listed elsewhere in this catalog or see an academic advisor in the appropriate department or division.

The course offerings for each academic quarter are listed in the course schedule published prior to the registration period.

College/School	*Level*	*Major Program*
College of Arts and Sciences	Undergraduate	Humanities
		Psychology
		International Relations (minor in Political Science)
		Computer Science
School of Business and Organizational Sciences	Undergraduate	Accounting
		Finance
		Insurance
		Management
		Marketing
	Graduate	Master of Business Administration
		Master in Management Accounting
School of Education	Undergraduate	Emotional Disturbances
		Mental Retardation
		Specific Learning Disabilities
		Elementary Education
	Masters	Emotional Disturbances
		Mental Retardation
		Specific Learning Disabilities
		Elementary Education
		Early Childhood Education
		Bilingual Education (under development)
		Educational Administration & Supervision
		Adult Education
		Vocational Technical Education (under development)
		Curriculum and Instruction
		Human Relations Education (under development)
		Intercultural Education (under development)
		School Psychology (under development)
		(other areas under consideration)
	Doctorate	Bilingual Education (under development)
		Educational Administration & Supervision
		Adult Education (under development)
		Vocational Technical Education (under development)
		School Psychology (under development)
		Community College Education (under development)
School of Public Affairs and Services	Undergraduate	Criminal Justice
		Health Services Administration
		Social Work
		Public Administration
	Graduate	Master of Science Criminal Justice
		Master of Health Services Administration
		Master of Public Administration
School of Technology	Undergraduate	Communications
		Medical Records Administration

Certificate Programs

Certificate Programs at Florida International University

Certificate Programs at FIU are combinations of courses with a common base or interest, selected from one or more academic disciplines and so arranged as to form an area of academic concentration. Two types of certificates are awarded by the College or Schools.

Academic Certificate—awarded with the bachelor's degree; or, upon completion of an approved area of concentration, to a student already possessing a bachelor's degree. This certificate is interdisciplinary in nature.

Professional Certificate—awarded to a student upon completion of an approved area of concentration. This certificate need not be interdisciplinary in nature or associated with the bachelor's degree.

Certificate Programs

Apparel Management
Banking Certificate Program
Bilingual Education (under development)
Caribbean-Latin American Studies Certificate Program
Consumer Affairs Certificate Program
Educational Administration (under development)
Emergency Medical Services Certificate Program
Ethnic Studies Certificate Programs: Black, Jewish, Cuban, Comparative
Food Technology
Heating, Ventilating and Air Conditioning Design Certificate Program
Industrial and Labor Relations
Industrial Safety Certificate Program
Information Systems
International Development Education (under development)
Instructional Development Education (under development)
Insurance Certificate Program
Linguistics Studies Certificate Program
Marketing
Marketing Certificate
Marine Science Certificate Program
Personnel Administration Certificate Program
Production and Manufacturing
Savings and Loan Certificate Program
Technical-Vocational Education (under development)
Transportation Management Certificate Program
Western Social and Political Thought Certificate

Apparel Manufacturing Management Certificate Program

The professional certificate in Apparel Manufacturing Management is awarded to persons who demonstrate manufacturing management competencies specifically related to the apparel industry. This certificate is primarily designed to meet the needs of those presently employed in the apparel industry who desire the management skills necessary for career effectiveness and mobility. The courses are planned and taught under the guidance of an advisory committee of local leaders in the apparel industry.

A Certificate in Apparel Manufacturing Management will be awarded upon satisfactory completion of thirty credits as listed in the Certificate requirements. These courses may be taken by Special Students with the advice of the Certificate Program Director. Students should complete an application form at the time of their first course registration.

Banking Certificate Program

The Certificate in Banking core program consists of four undergraduate/graduate finance courses representing approximately 200 contact hours between instructors and participants. Participants enrolled in the certificate program may elect to take each course for a grade or on a credit only basis. Either undergraduate or graduate credit may be awarded to those students enrolled for a grade who successfully fulfill the course requirements. Upon successful completion of the four course sequence, a certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

The program should be of interest to persons currently employed in banking and who wish to sharpen their knowledge and skills, management track personnel, individuals who sell bank services and individuals (although not currently employed in banking) who desire a career in bank management. The program has been designed by the Florida International University Finance and International Business Department in cooperation with several Florida commercial banks.

The program has qualified for tuition reimbursement by many of the participating institutions. Prospective participants should see their personnel officer or training director for additional information concerning tuition reimbursement.

The program goals include: acquainting the participant with the investment, financing, and other policy decisions within the scope of the corporate finance officer's authority structure; acquainting the participant with the functioning of the authority structure; acquainting the participant with the function of the American capital market and the institutions which service these markets; surveying commerical bank management techniques and methods of operation (emphasis is placed on the goals of the commercial bank and the methods of obtaining these goals); and to develop within the participant the ability to systematize the business loan evaluation process such that a sound rational credit-loan decision can be made.

Caribbean-Latin American Studies Certificate Program

Caribbean and Latin American Studies at Florida International University represents one way in which the University fulfills its commitment to furthering international understanding. The Caribbean-Latin American Studies Certificate Program encourages students to take an interdisciplinary approach to the study of the Caribbean and Latin America. The Certificate is awarded to both degree and non-degree students who have successfully completed the Certificate requirements. For students pursuing a bachelor's degree, the Certificate Program should be understood as a complement to the students' regular, major area or discipline of study. For non-degree students, the Certificate represents one way in which a fuller, more complete understanding of the Caribbean and Latin America can be gained without pursuing a full course of study at the University.

Consumer Affairs Certificate Program

The certificate program in consumer affairs in intended to provide a sound educational base for those dealing with consumer affairs matters as buyers or sellers. The courses leading to the certificate can serve those pursuing careers in consumer affairs, and provide personal benefit to individuals in their roles as consumers.

The certificate program is intended to provide business, government, industry, and labor with a resource for educating selected personnel

(Continued)

Certificate Programs

in a broad range of subject matter related to consumer affairs.

Emergency Medical Services Certificate Program

The objective of the program is to train managers of EMS systems (such as Emergency Departments in hospitals, fire rescue squads and coast guard), to manage efficient and effective EMS systems. In addition, the program is designed to help planners, coordinators and evaluators in local, regional and state level EMS systems to make better decisions in an environment that is rapidly changing.

The program is oriented to those people who are already in the field of emergency medical services, with the intention of meeting the individual needs of these trainees, considering their expertise, areas of responsibility and time available for training. The program will educate them so that they are better prepared to provide expertise either in the developmental or operational phases of local, regional and state EMS systems.

Ethnic Studies Certificate Programs: Black, Jewish, Cuban and Comparative

The College of Arts and Sciences offers the student programs in ethnic studies in recognition of the place ethnic studies enjoys in social sciences and humanities and of its importance in today's world. The programs seek to establish a proper balance between academic goals and objectives and the ongoing concerns of the University's local and international constituencies. The programs address four specialized areas: Black studies, Jewish studies, Cuban studies, and comparative studies.

Specialized courses in Black studies include: Afro-American Anthropology, Area Studies, Social Conflict in Multi-Ethnic Societies, Regional Literature in English, Special Topics, Major American Literary Figures, Individuals, and History and Evolution of Jazz.

Specialized courses in Jewish studies include: Political Urban Jewish Leadership, International Relations of the Middle East, Population and Geography of the Middle East, and the Prophets.

Specialized courses in Cuban studies include: Cuban History, Latin American and Caribbean Social Structures, Third World Theory, Genre Studies (with reference to Cuban literature), The Economic Development of Cuba, and International Relations of the Caribbean.

Core courses/comparative studies include: Minorities, Ethnic Politics, Ethnicity and Nationality, Economics of Race and Sex Discrimination, and Attitudes and Ethnicity.

Food Technology

This program provides the student with the specialized knowledge in the purchase of fresh produce, storage, processing, packaging and distribution of food products.

Heating, Ventilating and Air Conditioning Design Certificate Program

The purpose of this professional certificate program is to produce a learning experience that will enhance the design capabilities of professionals in the field. Emphasis will include the engineering science background as well as the practical applications of systems design.

Industrial and Labor Relations

This program provides the student with the specialized knowledge in labor studies, collective bargaining and labor-management relations.

Industrial Safety Certificate Program

The objectives of the professional certificate program in industrial safety is to present an integrated learning experience that will provide the student with a minimum level of expertise in the specialized area of Occupational Safety. Particular emphasis will be placed on application, interpretation and administration of the Federal Occupational Safety and Health Act and other regulations in an industrial setting. The Program is intended to provide skills which will be directly applied in industry.

Insurance Certificate Program

The certificate program in professional insurance accomplishment is designed to enable individuals in, or wishing to enter, the insurance industry to obtain recognition for their attainments in insurance education.

The courses leading to the certificate may be taken by both degree-seeking students as part of their regular programs, or, by special non-degree-seeking students who may be seeking professional recognition and qualifications.

The Certificate Program requires participants to obtain 30 quarter hours, or six five-credit hour classes, in senior (4000) level insurance courses. The Insurance Certificate requires participants to take five required courses and one elective course.

Linguistics Studies Certificate Program

While the University does not offer an undergraduate degree in linguistics studies, it does provide a certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of linguistics. This certificate is designed to meet the needs of those who have a general interest in linguistics studies, as well as those for whom work in linguistics would assist in career planning or advancement.

Information Systems Certificate Program

This program is designed as a three course sequence for systems professionals and users heavily involved in information systems development activity. These courses may be taken as a part of a regular degree program, or by special students not pursuing a formal degree. The purpose of the program is to provide advanced study to complement the work experience of practitioners who deal with information systems problems on a regular basis.

Marketing Certificate

The Certificate in Marketing Program is open to both degree and non-degree seeking students interested in acquiring knowledge and skills in Marketing and documentary evidence of this accomplishment. The Certificate program is aimed specifically at majors throughout the University, particularly those students in the College of Arts and Sciences and Professional Schools, and at individuals currently working in the business world. The Certificate program seeks to enhance individual capabilities for the discharge of responsibilities at a high performance level while giving a measure of professional recognition for the achievement of significant competence in the field. The program is not open to marketing majors.

The Certificate Program is comprised of a set of six five-credit hour undergraduate marketing courses—one introductory course at the junior (3000) level, the prerequisite for all the other

(Continued)

Admission

courses in the program, and five at the senior (4000) level.

Marine Science Certificate Program

The Marine Science Program is designed to meet the needs of students whose general interests are geared to the natural sciences, environmental sciences or engineering. The traditional disciplines of biology, chemistry, physics and geolgy are reflected in the four courses required for the certificate in marine sciences. The broad background, in turn, prepares students for work in technical fields, for advanced graduate work, or for secondary school teaching.

Personnel Administration Certificate Program

The objective of this program is to provide training in advanced personnel management techniques and methods to personnel professionals who do not necessarily wish to seek a degree. The program is aimed at developing immediately applicable skills in individuals who are assumed to already have adequate foundation in the concepts and role of the personnel management function. A certificate of completion signed by the dean of the School will be awarded to any student who completes the program of four five-credit hour courses (20 hours total) in the personnel management area of concentration at the graduate level.

Production and Management

This program provides the student with the specialized knowledge in the processes, cost, planning and control of manufactured products.

Savings and Loan Certificate Program

The program consists of four undergraduate/graduate finance courses representing approximately 200 contact hours between instructors and participants. Participants enrolled may elect to take each course for a grade or on a credit-only basis. Upon successful completion of the four-course sequence, a certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

The program should be of interest to persons currently employed at the middle management level in a savings and loans institution who wish to sharpen their industry knowledge, i.e., branch managers, auditors, data processing people, management track personnel, individuals who sell services and individuals (although not currently employed in savings and loan institutions) who desire a career in savings and loan management. The program has been designed by the Florida International University Finance and International Business Department in cooperation with several Florida savings and loans institutions. The program also qualifies for tuition reimbursement at many of the participating institutions. See your personnel officer or training director for additional information.

The program goals include: acquainting the participant with the functioning of the American capital markets and the institutions which service these markets; to survey savings and loan management techniques and methods of operation. Emphasis is placed on the goals of the savings and loans institutions, and the methods of reaching these goals; and to develop within the participant the ability to systematize the loan evaluation process such that a sound rational credit-loan decision can be made. With the savings and loan program, emphasis will be placed upon the comprehension of the savings, investment, insurance and annuity goals of the individual (personal finance).

Transportation Management Certificate Program

The Department of Marketing and Environment offers a Certificate in Transportation Management. The program is designed to enable students employed in, or wishing to enter, the transportation industry to obtain recognition for their attainments in transportation education.

The courses leading to the certificate may be taken by both degree-seeking students as part of their regular programs, or by special non-degreee seeking students who may wish to obtain professional recognition and qualifications.

The Certificate Program requires participants to obtain 30 quarter hours, or six five-credit hour classes, in senior (4000) level transportation courses, of which 20 hours are required, 10 hours elective.

Western Social and Political Thought Certificate Program

This certificate program is designed to introduce the student to the history of western social and political thought. The object of the certificate is to give interested students a synoptic view of the basic social and political concepts that have characterized western thought since its inception. As such, the certificate student will be required to take related course work in various academic departments, a thematic course on the western concept of order, and at least three tutorials that will involve all faculty and students in the program.

Admission

FLORIDA INTERNATIONAL UNIVERSITY ENCOURAGES APPLICATIONS FROM QUALIFIED APPLICANTS WITHOUT REGARD TO SEX, PHYSICAL HANDICAP, OR CULTURAL, RACIAL, RELIGIOUS, OR ETHNIC BACKGROUND OR ASSOCIATION.

Undergraduate Programs

A student who has completed an *Associate of Arts* degree at a Florida public community college, or has earned 90 quarter hours (60 semester hours) of college credit at any other accredited institution at an acceptable performance level, and has completed the general education requirements (or the equivalent) as listed in the Academic Regulations section of the catalog, is eligible for admission to the University.

A student who has completed an *Associate of Science* degree, or has earned 90 quarter hours (60 semester hours) of credit at a Florida public community college, and who has completed at least 40 quarter hours of the 54 quarter hours of general education requirements (or the equivalent) as listed in the Academic Regulations section of the catalog, is eligible for admission to the University, provided his overall GPA is at least 2.00.

A student who meets the above admission requirements, but who has not completed the remaining general education course requirements and or the prerequisite courses for admission to a particular degree program, may complete his or her preparatory work either (a) at a Florida public community college or accredited institution, or (b) in the College and Schools of Florida International University, or (c) by achieving a satisfactory score on the appropriate CLEP examination(s).

The School of Technology normally regards the *Associate of Science* degree in an appropriate technical discipline as the full equivalent of the first two years (90 quarter hours) of the *Bachelor of Technology* program.

An undergraduate student who has been denied admission to a program of the University for *academic* reasons may appeal the decision.

(Continued)

Admission

He or she should contact the Chairperson of the program, then the Dean of the College or School of the program, and finally, if necessary the Vice President for Academic Affairs. An undergraduate student who has been denied admission to the University for other than academic reasons may appeal to the University Registrar.

Prerequisite Courses and Additional Requirements.

Most departments require for admission to their degree programs certain freshman and sophomore courses in addition to the general education program. To determine nature and extent of additional requirements which apply in each case, the applicant should consult that section of the University Catalog which deals with the program the applicant wishes to pursue at Florida International University.

Graduate Program

A student seeking admission into a graduate program of the University must meet the minimum standards set forth by the Florida Board of Regents.

A bachelor's degree or equivalent from a regionally accredited university or college.

A "B" or better average in all work attempted while registered as an upper division student seeking the bachelor's degree, OR a total score (quantitative plus verbal) of 1,000 or higher on the *Graduate Record Examination* or an equivalent score on some other measure specified by the University. Any disabled student who must take a graduate admission test (i.e. G.R.E. or G.M.A.T.) should contact the special services counselor/coordinator at 552-2434 before registering for the exam.

All applicants are required to present scores on the *Graduate Record Examination* or 450 on the *Graduate Management Admission Test—(GMAT)* (School of Business and Organizational Sciences).

It is possible for an applicant who fails to meet these criteria to appeal the admission decision and be considered under the Board of Regents' 10 per cent policy. This policy allows up to 10 per cent of the graduate students admitted for a particular academic year to be admitted as exceptions to the above criteria.

Admission Procedures

Undergraduate and graduate degree-seeking students may obtain an application for admission, catalog, and other material from the Office of Admissions and Records, Florida International University, Tamiami Campus, Tamiami Trail, Miami, Florida 33199, or North Miami Campus, North Miami, Florida, 33181.

Completed admission application and all supporting credentials must be on file with the Office of Admissions and Records before a final decision can be made regarding the acceptance of an applicant. The following credentials are required by the Florida Board of Regents for admission:

Application for Admission: A fifteen dollar ($15) *non-refundable* application fee must accompany the completed application form. The deadline for accepting applications each quarter is contained in the University Calendar given in the catalog.

Completed Academic Record: Official transcripts must be forwarded to the Office of Admissions and Records by the Registrar of all college-level institutions attended. It is the *responsibility of the applicant* to initiate requests for necessary transcripts (including final transcripts) from each post-secondary institution attended.

Note: Transcripts must be received no later than 15 days preceding the first day of class.

Student Health Form: Every student must complete a student health form. The forms will be supplied after a student is admitted the University.

Non-admitted degree-seeking student applications will be kept on file for one year from the requested date of entry.

Previously enrolled, degree-seeking students who have not attended classes for one year or more will be required to fill out an application for readmission, which can be obtained in the Office of Admissions and Records. (PC-140—Tamiami Campus and TC-145—North Miami Campus.) Such students must meet any new degree requirements which have been instituted since they were last enrolled.

If the student has attended other institutions since last enrolled at Florida International University, then transcripts must be sent by the Registrar directly to the Florida International University Office of Admissions. These transcripts must be received by Florida International University before a readmissions decision can be rendered.

Readmission

A degree seeking student once enrolled in the University, but who has not enrolled in any course for one year or more, is eligible for readmission under the regulations operative at the time of readmission. Such a student should contact the Office of Admissions and Records.

International Admissions Undergraduate and Graduate Admission Standards and Procedures

An international student must meet the regular admission requirements of the University and comply with the following:

Application and Fee: A completed admission application must be received by the University at least 3 months prior to the desired entering date, together with a non-refundable $15.00 (U.S. dollars) fee.

Academic Records: Appropriate official transcripts or certified copies of academic records and the English Translations, validated by an official public translator; and all other appropriate credentials must be forwarded to the Office of International Student Admissions.

Proficiency in English: Proficiency in English must be established if the native language is not English. The following are accepted ways to verify proficiency:

- A minimum score of 500 in the *Test of English as a Foreign Language* (TOEFL). For information write to: the TOEFL program, Box 899, Princeton, New Jersey, 08540, U.S.A.
- The ALIGU Test, *(American Language Institute, Georgetown University),* Washington, D.C. 20007.
- ELS Language Center certification of satisfactory completion at the 109 level of proficiency. For information write to: ELS Language Centers, 3331 Ocean Park Blvd., Suite 201, Santa Monica, Calif. 90405.
- Successful completion of 45 quarter hours (30 semester hours) of course work at an American college or university including 9 quarter hours (6 semester hours) of English composition.

Declaration and Certification of Finances: A Declaration and Certification of Finances must be completed before the Certificate of Eligibility (Form I-20A) is issued. Upon receipt of application for admission the Declaration and Certification of Finances will be mailed to the applicant.

The University is required by immigration authorities to carefully check the financial resources of each student prior to issuing the Form I-20A. Therefore, it is important that the applying student know the costs of attending the university and have the necessary support funds for the period of enrollment.

Before completing the Declaration and Certification of Finances, review the estimate of institutional costs and living expenses. The total available to the student for the first and/or sec-

(Continued)

Registration

ond academic years must equal the total estimates of institutional costs and living expenses. All questions in the Declaration and Certification of Finances must be accurately answered to avoid unnecessary delay in processing.

After completing the Declaration and Certification of Finances, return the document to:

Office of International Student Admissions
Florida International University
Primera Casa 130
Tamiami Trail
Miami, Florida 33199 U.S.A.

The Declaration and Certification of Finances must be received by the University at least two months prior to the beginning of the quarter for which student expects to register. If the student is residing in the U.S.A., said document is due at least one month before the first day of classes.

Health Insurance: Florida International University requires that all international students purchase health insurance in order to help pay for major medical expenses. The health insurance policy should be kept active as long as the student is enrolled at the University. Information on the most economical plans is available from the Office of International Student Services, University House 340.

Graduate Students: For information about the *Graduate Record Examination* (GRE) and *Graduate Management Admission Test* (GMAT), write to Educational Testing Services, Princeton, New Jersey, 08540, U.S.A. Information about test center locations may also be obtained at the American Embassy in the student's home country.

Tuition: An international student is considered a non-resident, and, as such, will be assessed non-resident fees. As an *Undergraduate* student, $772.50 is the average tuition cost for each quarter (Immigration regulations requires an International student to attend school at least three quarters during an academic year). The average tuition fee is based on 15 credits, which is the minimum required load for an undergraduate international student. For a *Graduate* student, $620.00 is the average tuition cost each quarter. This tuition fee is based on 10 credits per quarter, which is the minimum required load for a graduate international student.

Annual Estimate of Cost

Single Student	*Undergraduate**	*Graduate*
Tuition	$2,835	$2,480
Books and Supplies	220	220
Housing and Food	3,600	3,600
Transportation	750	750
Miscellaneous	595	595
Total	$8,000	$7,645

**Immigration Naturalization Services regulations require that an international student attend school for 3 quarters within one academic year.*

Note: Opportunities for financial assistance are limited if an international student is not a U.S. citizen.

Full-time enrollment: The non-immigrant alien student on a F-1 visa is required by United States Immigration regulations to be enrolled full-time, except for summer session. He or she should make satisfactory progress toward the bachelor's or master's degree program objectives each term. Otherwise the continuation of study on a student visa may be jeopardized. Full-time enrollment for a student on an F-1 visa (student visa) is defined as enrollment in, and successful completion of, a minimum of 15 quarter hours each quarter (undergraduate) and 10 hours each quarter (graduate).

United States Department of Justice, Immigration and Naturalization Service Law and Regulations:

> It is the student's responsibility to comply with all non-immigrant alien requirements as stated under the United States laws under Section 101(a)(15)(f)(i) of the Immigration and Nationality Act. The University is required to report to the Immigration Office any non-immigrant alien student who:
>
> a. Does not register at the University at the time expected.
> b. Does not carry a full course of studies.
> c. Terminates attendance.

Granting official Extension of Stay is dependent upon the student's making normal academic progress toward the bachelor's or master's requirements.

Employment: An F-1 visa student may not be employed off campus while attending the University, unless permission has been granted by the U.S. Immigration and Naturalization Service. Normally, employment will not be permitted, especially during the student's first year of enrollment. Only under very special circumstances, because of unexpected conditions or emergencies which arise after the student's arrival, will an international student be recommended for a work permit. Adequate proof must be presented to the international student advisor in order to obtain the necessary authorization. On-campus employment can be authorized by the international student advisor.

Note: An international student will not be granted admission to the University until all academic and non-academic requirements have been met, including submission of the Declaration of Certification of Finances. *Under no circumstances should a student come to Florida International University without having received the official letter of admission and the I-20A Form.*

For further information regarding international student admission, please contact:

Office of International Student Admissions
Florida International University
Primera Casa 130
Tamiami Trail
Miami, Florida 33199 U.S.A.
(305) 552-2387

Registration

During each academic quarter, an official registration week is held, during which time all currently enrolled students who anticipate enrolling in the following quarter are expected to register for their courses. The new student will be notified of registration dates at the time he or she is officially notified of admission to the University.

Late Registration Fee

Approximately five weeks after each quarter begins, the official registration week for the *next* quarter begins. During the one-week registration period, all currently enrolled, degree-seeking students are expected to register.

Although degree-seeking and non-degree-seeking special students are encouraged to register during the official one-week registration period, they are not required to register until Registration Day. Those students who request to register during the first week of classes will be assessed a $25 late registration fee.

Withdrawal from the University

A student who wishes to leave the University during the quarter for any reason whatsoever must *officially withdraw* through the Office of Admissions and Records.

A student who *officially registers* for a particular quarter and subsequently decides not to attend (no shows) or to leave during the quarter must *officially withdraw* from the University through the Office of Admissions and Records. (Dropping all courses is equated to a withdrawal. Therefore, a *withdrawal form* instead of a drop/add card *MUST* be completed).

The transcript record of a student who withdraws during the first week of classes will contain NO references to the student being registered that quarter.

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Academic Regulations

The transcript record of a student who *officially withdraws* after the first week and before the end of the sixth week of classes will contain a *WI* for each course.

The transcript record of a student who stops attending the University without officially withdrawing will contain a NC or F grade for each course, as appropriate to the course grading option.

Special Student (Non-Degree Seeking) Registration

The special student classification is primarily designed for the person who is not interested at the time of registration in working toward a degree at Florida International. The following regulations will apply to a person registered as a special student:

- He or she is not required to meet the usual admission requirements. Such a student is *not* officially admitted as a regular student and registration as a *special student* in no way implies future admission as a regular, degree-seeking student.
- He or she must complete a non-degree seeking, special student application at the time of registration.
- Registration for specific classes is on a space-available basis and is determined at the time of registration, on Registration Day, or during Late Registration.
- Special students may not register for 600 level courses during Registration Week, but must wait to register on Registration Day.
- Credit earned will *not* be counted toward a degree at Florida International unless the student subsequently applies for regular admission and is accepted as an undergraduate or graduate student.
- No more than the following quarter hours earned as a special student may be counted toward a degree:
  Graduate Level:15 quarter hours
  Undergraduate Level:20 quarter hours
  The appropriate Dean must approve the acceptance of credit earned as a special student;
- If a change to regular, degree-seeking student status is desired, an appropriate application must be filed in the Office of Admissions and Records;
- Regular rules of scholarship will apply;
- A faculty advisor is not assigned, but academic counseling is available from the academic unit offering the course.
  Note: A foreign student is not permitted to enroll as a special student. Immigration regulations require a foreign student to be degree-seeking.

Academic Regulations

Note: Questions concerning the University's academic regulations should be directed first to the student's academic advisor. Subsequent concerns may be directed to the appropriate Dean or the Office of Admissions and Records.

General Regulations Degree Requirements

Florida International University will confer the bachelor's degree when the following conditions have been met:

1. Successful completion of a minimum of 180 quarter hours of credit with the required grade point average.
2. Completion of the last 45 credit hours of coursework at Florida International University.
3. Satisfactory completion of Florida International University's general education requirement.
4. A minimum of 2.0 G.P.A. on all coursework completed at Florida International University.
5. Recommendation of the Faculty of the College or School awarding the degree.
6. Certification by the Dean of the College or School concerned that all requirements of the degree being sought have been completed.

Florida International University will confer the *master's* degree when the following conditions have been met.

1. Successful completion of a minimum of 90 quarter hours for degrees requiring two years of work and 45 quarter hours for those requiring one year of work.
2. A minimum 3.0 G.P.A. on all coursework completed at Florida International University.
3. Recommendation of the faculty of the College/School awarding the degree.
4. Certification by the Dean of the College/School concerned that all requirements of the degree being sought have been completed.

Note: Normally, a minimum of 35 quarter hours must be completed at Florida International University for a 45-quarter-hour program and 75 quarter hours for a 90-quarter-hour program.

General Education Requirements

Florida International University requires that all undergraduate students must have completed a general education program prior to graduation. The general education program as presently defined by the Board of Regents consists of 54 quarter hours (36 semester hours). Florida International University recognizes the following general education program: 9 quarter hours each in the areas of social science, natural science, English composition, and humanities; 4 quarter hours in mathematics, and 14 quarter hours of electives in the above areas. In this connection, the following policies have been established.

- A student who has graduated from a Florida public community college with an *Associate in Arts* degree shall be considered as having met the general requirements of Florida International University;
- A student who has met the general education requirements of any institution in the State University System of Florida shall be considered as having met the general education requirementss of Florida International University;
- A student who has taken his or her freshman and sophomore years in a college other than a Florida public community college or at an institution in the State University System of Florida may similarly receive credit for such courses shown on his or her transcripts as meeting the general education requirements;
- A student may be admitted before completion of an equivalent general education program, provided such a program can be completed through an inter-institutional registration arrangement with a Florida public community college or through some other arrangement designed to meet individual needs as noted in the section describing undergraduate admission standards.

Standards of Conduct

Students are subject to federal and state laws and local ordinances as well as regulations prescribed by Florida International University and the Florida Board of Regents. The breach or violation of any of these laws or regulations may result in judicial or disciplinary action.

When a student is involved in an offense resulting in criminal charges, prior to his admission, the circumstances of the case may be reviewed by the appropriate Student Affairs Committee to consider the student's eligibility

(Continued)

Academic Regulations

for admission to the university as well as participation in extracurricular activities.

Student Grievance Procedures

On academic matters, aggrieved students should first discuss their complaint with the departmental chairperson. Problems regarding general university (non-academic) matters should be directed to the office of the Vice President of Student Affairs. Students should consult the Student Handbook for details on university grievance procedures.

Classification of Students and Course Loads

Students are classified by the Office of Admissions and Records as follows:

Junior: Through 134 quarter hours credit.

Senior: 135 or more quarter hours credit, but no baccalaureate degree earned at Florida International University or elsewhere.

Post Baccalaureate: Any student enrolled in graduate-level courses who has earned a bachelor's degree but is not admitted to a graduate degree program.

Graduate: Any student admitted to a graduate program.

Special Student: Any non-degree seeking student enrolled in undergraduate or graduate level courses.

In terms of credit-hour load, students are classified as full-time according to the following minimum schedule:

	Undergraduate Quarter Hours	*Graduate Quarter Hours*
Credit-Hour Loads	10	10
Veterans Benefits (full allowance)	12	9
Veterans Benefits (¾ allowance)	9	7
Veterans Benefits (½ allowance)	6	5
Foreign Students (F-1 Visa)	15	10

Part-time students are those taking less than the figure indicated. The normal course load for a full-time undergraduate or graduate student is 15 quarter hours. A course load of more than 20 quarter hours must be approved by the student's advisor *and* dean (or designee). An *undergraduate Foreign student* must carry and satisfactorily complete 15 quarter hours each quarter, and a *graduate foreign student* must carry and satisfactorily complete 10 quarter hours each quarter to meet the full-time status requirement of the Immigration and Naturalization Service.

Class Attendance

The University does not require class attendance and does not maintain penalties for non-attendance. Individual faculty may establish attendance criteria in classes where it is necessary for academic reasons. The individual academic units may establish their own attendance policies with the approval of the Vice President for Academic Affairs.

Student Records

Florida International University assures the confidentiality of student educational records in accordance with State University System rules, state and federal laws including the Family Educational Rights and Privacy Act of 1974, as amended (commonly called the Buckley Amendment). Student academic records are maintained, generally, in the Office of the Registrar and in the academic department of the student's major. As a rule, all currently enrolled and former students have the right to review their records to determine the content and accuracy of the records. Parents of dependent students, as defined by the Internal Revenue Code, and who give evidence of the dependent status, have the same rights. Students can generally, for the cost of copying, have copies of any documents in their file. This does not apply to transcripts from another institution; students may get copies of these from that institution.

Program and Course Regulations

Academic Definitions:

Credit—The term "credit" as used refers to one hour of classwork or the equivalent each week for an entire academic quarter.

Major—An integral part of the bachelor's and master's degree is a major concentration of course work in an approved academic discipline or area. The major areas of study are listed on pages GEN 4, 5 and 6 of the Catalog. The exact course and credit requirements and prerequisites for each major are outlined in the departmental program areas of the Catalog.

Electives—A student may usually select courses from any academic area to complement his or her major area(s) of study or meet his or her interests, in order to fulfill the credit hour requirements for the bachelor's or master's degree. Prerequisite course requirements should be considered in selecting elective courses.

Minor Program—A Minor Program is an arrangement of courses that enables the student to develop some degree of expertise in one area of study. A minor is associated with the completion of the bachelor's degree, but is not interdisciplinary in nature.

Certificate Program—In the College and Schools of the University, a Certificate Program is a combination of courses with a common base or interest selected from one or more academic disciplines and so arranged as to form an area of academic concentration. Two types of certificates are awarded by the College or Schools:

Academic Certificate—awarded with the bachelor's degree, or upon completion of an approved area of concentration to a student already possessing a bachelor's degree. This certificate is *interdisciplinary* in nature.

Professional Certificate—awarded to a student upon completion of an approved area of concentration. This certificate need not be interdisciplinary in nature or associated with the bachelor's degree.

A Certificate in Continuing Studies is awarded to a person who has attended a conference, seminar, or program sponsored by the Division of Continuing Education and Special Programs.

Two Majors—Any undergraduate student who elects to do so may carry two majors and work to fulfill the requirements of both concurrently. Upon successful completion of the requirements of two majors, a student will be awarded only ONE degree unless a minimum of 45 appropriate quarter hours in addition to the requirements of the first degree have been earned. In cases where the requirements of two majors have been met and one degree is involved, a notation denoting both majors will be entered on the transcript.

Two Degrees—Two bachelor's degrees may be awarded simultaneously when the following conditions have been met:

1. Requirements for two majors have been completed as certified by the appropriate academic units.

2. A minimum of 45 appropriate quarter hours in addition to the requirements of one degree has been earned.

A graduate from an accredited four-year institution who applies for admission to work towards a second bachelor's degree must meet the requirements of the major department, which shall include (but are not limited to) a minimum of 45 quarter hours of course work, as well as any other University-wide graduation requirement.

Change of Major—A student may change majors by processing a *Request for Change of Major* form. The form and directions are available in the Office of Admissions and Records.

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Academic Regulations

Transfer Credit

An undergraduate student admitted to the University will receive credit for all previous academic work appropriate to the degree desired in accordance with the Articulation Agreement with Florida public community colleges, the program standards of the academic department or program, and the limitations noted below. Although the actual awarding of transfer credit is made by the Office of Admissions and Records, the final determination regarding applicable transfer credit accepted toward the fulfillment of degree requirements rests with the Dean of the College or School in which the student is enrolled.

Limitations on Transfer Credit

A student transferring from a four-year college may transfer up to 135 quarter hours (90 semester hours), and those transferring from two-year colleges may transfer up to 90 quarter hours (60 semester hours) toward a bachelor's degree. In individual cases, at the discretion of the appropriate academic dean, a greater number of credits may be transferred.

Normally, the grade of "D" will be accepted for transfer; however, such coursework in the major field is subject to review and approval by the appropriate dean.

Normally, credit from non-accredited institutions will not be accepted; however, such credit, when presented, will be considered on an individual basis by the appropriate College or School.

Credit from military schools will be considered for transfer in accordance with the recommendations of the American Council on Education.

Credit from foreign institutions will be considered on an individual basis. Credit will be granted for all work which is applicable toward the degree being sought.

Acceleration

The academic programs of the University are planned in such a manner that a student may complete some of his or her upper division degree requirements through one or more of the mechanisms listed below. Specific information on the accelerated mechanisms utilized in each academic program is available from the department or program of the student's major.

College Level Examination Program (CLEP)

The College Level Examination Program is designed to measure knowledge in certain subject matter areas of general education. There are two types of CLEP tests: the General examination and the Subject examination.

Because CLEP credit is regarded as transfer credit, no matter how earned, the maximum transferability of credit under CLEP, both General and Subject examinations combined is 45 semester (or 67.5 quarter) credits.

Not more than six semester (or nine quarter) hours will be transferred in each of the five areas of the General Examinations (English, humanities, mathematics, natural sciences, social sciences–history).

Note: A student who desires additional information on CLEP should contact the Office of Admissions and Records or School and College Relations.

Departmental Credit by Examination

Departmental credit by examination is available for certain courses. A student who has already gained knowledge of a subject offered at the University and who wishes to take an examination in lieu of taking the course should discuss the matter with his or her academic advisor *and* with the department offering the course.

Awarding departmental credit by examination is the prerogative of each academic unit. To receive credit by examination, a student must be a regular degree-seeking student and register for the courses in the regular manner.

Credit for Life/Work Experiences

Undergraduate—The awarding of credit for life/work experience is the prerogative of each academic department or program. Only the degree-seeking student is eligible to receive this type of credit. The experiences must be applicable to the degree program of the student, and should be discussed and appropriately documented at the time the desired program of study is initially discussed and decided with the student's program advisor.

Graduate—Graduate credit, per se, will not normally be awarded for life experience. In cases where a student's life experience would appear to have been sufficient to develop the understanding and skills associated with a course that would otherwise be included in his graduate program of study, he or she will be allowed to register for Independent Study credits and demonstrate competency through development of an appropriate project acceptable to the faculty person who represents that specific area of specialization. Not more than 20 quarter hours of a 45 credit master's degree, nor 30 quarter hours of a 90 credit master's degree, may be so earned. A student wishing to have this policy waived, wholly or in part, may petition the Dean of the academic unit to which he or she has been admitted for special consideration and final responsibility for a decision will rest with that Dean.

Traveling Scholar Program

The University participates in a traveling scholar program which enables a *graduate* student to take advantage of special resources available on another campus but not available on his or her own campus, special course offerings, research opportunities, unique laboratories, and library collections. Further information may be obtained from the Dean of the graduate program in which the student is enrolled.

Grading System

Grades	*Definition*	*Grade Points Per Credit Hour*
A	Excellent	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure	0
CR	Satisfactory	N/A
NC	No Credit	0
IN	Incomplete	N/A
WI	Withdrew from University	N/A
AU	Audit	N/A
DR	Dropped Course	N/A
NR	Grade Not Reported or Invalid	N/A
EM	Examination	N/A

Note: All courses for which a student is officially registered at the end of the first week of classes and on which a grade of A, B, C, D, F, or NC is received are calculated in the GPA.

Credit/No Credit Option

The College/Schools may specify particular courses which may be taken for grades of CR/NC *only* and those which may be taken, at the option of the student, for either a CR/NC or a regular ABCDF grade. A student who decides to take a course that offers a choice of CR/NC grading or ABCDF grading must indicate at the time of course registration which grading option is desired. Once the grading option has been indicated, a student will *not* be allowed to change his or her mind.

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Repeated Courses

A student who repeats a course should file a Repeated Course Form with the Office of Admissions and Records. All courses taken by a student with the grades earned will be reflected on the transcript with each repeated course appropriately designated. A student may repeat a course as many times as he/she wishes; only the last grade will be calculated in Grade Point Average.

Dropping and Adding Courses

The first week of each quarter is the official drop/add week. During this period, a student may add courses, drop courses or withdraw (with no records kept) from the University (with a fee refund.)

Courses officially dropped during the second through the sixth weeks of classes are recorded on the transcript with a symbol of DR (dropped).

Change or Correction of Grades

Once submitted, end-of-quarter grades (except incompletes) are final and are subject to change *only* through a *Change of Grade* Form to correct an error in computation or transcribing, or where part of the student's work has been unintentionally overlooked. A change-of-grade form requires the instructor's statement as to the reason for the change, the instructor's signature, and the approval of the appropriate Academic Dean, and must be submitted within one calendar year after the date of the initial end-of-quarter grade.

Grade Reports

At the end of each quarter, the Office of Admissions and Records provides each registered student a copy of his or her grades.

Academic Honors (Undergraduate)

To graduate with *honors* a student must have earned a cumulative GPA between 3.500–3.749 and have received no more than two NC's.

To graduate with *high honors* a student must have earned a cumulative GPA between 3.750–3.999 and have received no more than one NC.

To graduate with *highest honors*, a student must have earned a cumulative GPA of 4.0 and have received no NC.

To graduate with the above honors the student must have completed sixty credit hours at Florida International University since the Fall Quarter of 1975.

Dean's List

Any undergraduate student who earns a quarter average of 3.5 or better on 10 or more hours of course work for which grade points are earned is placed on the Quarter Dean's List. This achievement is noted on the student's quarterly report of grades and permanent academic record.

Academic Warning, Probation and Dismissal

WARNING: A student whose cumulative GPA falls below a 2.0 (undergraduate) or 3.0 (graduate) will be placed on *WARNING* indicating academic difficulty.

PROBATION: A student on *WARNING* whose cumulative GPA falls below 2.0 (undergraduate) or 3.0 (graduate) will be placed on *PROBATION* indicating serious academic difficulty. The College/School of the student on *PROBATION* may appropriately communicate conditions which must be met in order to continue to enroll.

DISMISSAL: A student on *PROBATION* whose cumulative and quarterly GPA's fall below a 2.0 (undergraduate) or 3.0 (graduate) will be automatically dismissed from his/her program and the University. The student has ten working days to appeal the dismissal decision. This appeal must be made in writing to the Dean of the College/School in which the student is enrolled. If the student's appeal is denied, the dismissal from the University is for a minimum of four quarters. After four quarters, the student may apply for readmission to the University in the same or a different program, or register as a special student.

Final Examinations

While the University calendar does not designate specific dates as a final examination period, final course examinations may be given at the discretion of the faculty member teaching the course.

Application for Graduation

Each student who plans to graduate is required to submit to the Office of Admissions and Records an *Application for Graduation* Form. This form (supplied by the Office of Admissions and Records) must be submitted before the end of the third week of classes of the academic quarter in which graduation is expected. A student turning in the Application for Graduation after the deadline will graduate the following quarter. There is no charge for applying for graduation.

Premedical Advisement

The Premedical Advisement and Evaluation Committee, a committee of the College of Arts and Sciences, advises students interested in entering the health professions and prepares recommendations for students who are applying to health-related professional schools.

Students desiring to enter the health professions are advised to contact the Premedical Advisement and Evaluation Committee at the earliest possible time, preferably before the spring quarter prior to the academic year in which they will apply to professional schools. The office of the Premedical Advisement and Evaluation Committee is in the Department of Physical Sciences, OE 200; 552–2605.

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Classification of Students for Tuition Purposes — Florida or Non-Florida

The policy relating to the classification of students for tuition purposes is defined by the Florida Board of Regents as follows:

Florida Student Definition

(1) For the purpose of assessing registration and tuition fees, a student shall be classified as a "Florida" or "non-Florida" student.

(a) A "Florida student" is a person who has domicile in and who shall have resided in the state of Florida for at least twelve (12) consecutive months immediately preceding the first day of classes of the academic term in which the student enrolls. In determining residency, the university may require evidence such as voter registration, driver's license, automobile registration, location of bank account, rent receipts or any other relevant materials as evidence that the applicant has maintained continuous residency. Physical presence for the entire twelve-month period need not be required so long as the conduct of the student, taken in total, manifests an intention to make Florida his or her permanent dwelling place. This means that, during the twelve-month period, the student may visit outside the state for brief periods. It

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does not shorten the twelve-month period. If such student is a minor, it shall mean that the parent or parents, or legal guardian of the student shall have domicile in and have resided in the state of Florida for the period stated above. "Florida student" classification shall also be construed to include students who hold an Immigration and Naturalization Form I-151, Resident Alien Registration Receipt Card, or Cuban Nationals or Vietnamese Refugees who are considered as Resident Aliens, provided such students meet the residency requirement stated above and comply with subsection (2) below. The burden of establishing facts which justify classification of a student as a resident and domiciliary entitled to "Florida student" registration rates is on the applicant for such classification.

(b) In applying this policy:

1. "Student" shall mean a person admitted to the institution, or a person allowed to register at the institution on a space-available basis.

2. "Minor" shall mean a person who has not attained the age of 18 years, and whose disabilities of minority have not been removed by reason of marriage or by a court of competent jurisdiction.

3. "Domicile" for fee paying purposes shall denote a person's true, fixed, and permanent home and place of habitation. It is the place where the applicant lives and remains and to which he expects to return when he leaves, without intent to establish domicile elsewhere.

4. "Parent" shall mean a minor's father or mother, or if one parent has custody of a minor applicant, it is the parent having court-assigned financial responsibility for the education of the student; or if there is a court-appointed guardian or legal custodian of the minor applicant, it shall mean the guardian or legal custodian.

5. The term "dependent student," as used in this rule, is the same as a "dependent" as defined in sections 151(e)(1)(2)(3) and (4) of the Internal Revenue Code of 1954. A copy of these provisions in the Internal Revenue Code of 1954 is incorporated in this rule by reference.

6. A "non-Florida" student is a person not meeting the requirements of subsection (a) above.

(2) In all applications for admission or registration at the institution on a space-available basis a Florida applicant, or, if a minor, the parent or legal guardian of the minor applicant, shall make and file with such application a written statement, under oath, that the applicant is a bona fide citizen, resident, and domiciliary of the state of Florida, entitled as such to classification as a "Florida student" under the terms and conditions prescribed for citizens, residents, and domiciliaries of the state of Florida. All claims to "Florida student" classification must be supported by evidence as stated in (1) if requested by the registering authority.

(3) A "non-Florida student" or, if a minor, his parent or guardian, after having been a resident and domiciliary of Florida for twelve (12) consecutive months, may apply for and be granted reclassification prior to the first day of classes of any subsequent term; provided, however, that those students who are non-resident aliens or who are in the United States on a non-immigration visa will not be entitled to reclassification. An application for reclassification as a "Florida student" shall comply with provisions of subsection (2) above. An applicant who has been classified as a "non-Florida student" at time of original enrollment shall furnish evidence as stated in (1) to the satisfaction of the registering authority that the applicant has maintained continuous residency in the state for the twelve months required to establish residence for tuition purposes. In the absence of such evidence, the applicant shall not be reclassified as a "Florida student." In addition, the applicant for reclassification must be accompanied by a certified copy of a declaration of intent to establish legal domicile in the state, which intent must have been filed with the Clerk of Circuit Court, as provided by Section 222.17, Florida Statutes. If the request for reclassification and the necessary documentation is not received by the registrar prior to the last day of registration for the term in which the student intends to be reclassified, the student will not be reclassified for that term.

(4) Unless evidence to the contrary appears, it shall be presumed by the registering authority of the institution at which a student is registering that:

(a) The spouse of any person who is classified or is eligible for classification as a "Florida student" is likewise entitled to classification as a "Florida student." This provision will not apply in the case of students who are non-resident aliens or who are in the United States on a non-immigration visa.

(b) If an applicant's eligibility for classification as a "Florida student" is based on the residency of the spouse, the spouse shall make and file with the application a written statement under oath, that said person is the spouse of the applicant and a bona fide citizen, resident and domiciliary of the state of Florida, entitled as such to classification as a "Florida student."

(c) No person over the age of 18 years shall be deemed to have gained residence while attending any educational institution in this state as a full-time student, as such status is defined by the Board of Regents, in the absence of a clear demonstration that he has established domicile and residency in the state, as provided under subsection (3) above.

(d) Any "Florida student" who remains in the state, after his parent who was previously domiciled in Florida or stationed in Florida on military orders removes from this state, shall be entitled to remain classified as a "Florida student" so long as his or her attendance at a school or schools in Florida shall be deemed "continuous". However, such student claiming continuous attendance must have been enrolled at a school, college or university in Florida for a normal academic year in each calendar year, or the appropriate portion or portions thereof, from the beginning of the period for which continuous attendance is claimed. Such a student need not attend summer sessions or other such intersessions beyond the normal academic year in order to render his attendance "continuous."

(5) Appeal from a determination denying "Florida student" status to applicant therefore may be initiated after appropriate administrative remedies are exhausted, by the filing of a petition for review pursuant to Section 120.68 F.S. in the District Court of Appeal in the appellate district in which the institution maintains its headquarters or where a party resides.

(6) Any student granted status as a "Florida student," which status is based on a sworn statement which is false, shall, upon determination of such falsity, be subject to such disciplinary sanctions as may be imposed by the president of the university.

(7) Special Categories—The following categories shall be treated as Florida residents for tuition purposes if adequate documentation is provided.

(a) A member of the Armed Services of the United States who is stationed in Florida on active duty pursuant to military orders, the spouse and dependent students.

(b) A veteran of the Armed Forces of the United States of America with twenty (20) or more years of active military service, including the spouse and dependent students of such veteran's immediate family, provided that the veteran is in Florida at time of retirement or moves to Florida within one year following retirement and files a declaration of Florida domicile.

(c) Full-time elementary, secondary, and community college faculty members under current teaching contracts in the state of Florida, and their spouses and dependent students.

(d) Full-time faculty, administrative and professional and career service employees of the University System and their spouses and dependent students.

(e) A student certified by his respective state for participation in the Academic Common Market Program of the Southern Regional Edu-

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cation Board who is enrolled in a program approved by the Florida Board of Regents.

(f) Florida domiciliaries living in the Panama Canal Zone who have not established domicile elsewhere, including the spouse and dependent students.

(g) Florida residents who had their residency in Florida interrupted by service in the U.S. armed forces, the Peace Corps or other similar volunteer organizations fostered by the United States government shall be deemed to have had residency in Florida during times of service in the aforementioned organizations.

(8) Reciprocal Agreements. The Board of Regents may enter into agreements with appropriate agencies and institutions of higher education in other states and foreign countries providing for the reciprocal exchange of students enrolled and prospective in higher educational institutions to facilitate utilization of public higher educational institutions in this state and other states or countries. Such agreements may include provisions for waiver or reduction of non-resident tuition for designed categories of students and may include contractural payments to such other state or country, subject to the availability of appropriations. Such agreements shall have as their purpose the mutual improvement of educational advantages for residents of this State and such other states or countries with whom agreements may be made.

Fees and Refunds

Fees

The fees are established by the Board of Regents as approved by the State Legislature. The fee structure for the 1979–80 academic year is as follows:

Fall, Winter, Spring Terms

	Florida Residents	*Non-Florida Residents*
Upper Level Undergraduate Courses	$16.50 per qtr. hr.	$51.50 per qtr. hr.
	$22.00 per qtr. hr.	$62.00 per qtr. hr.
Graduate Courses	$24.00 per qtr. hr.	$64.00 per qtr. hr.
Thesis		

Summer Term

	Florida Residents	*Non-Florida Residents*
Upper Level Undergraduate Courses	$10.50 per qtr. hr.	$45.50 per qtr. hr.
	$22.00 per qtr. hr.	$62.00 per qtr. hr.
Graduate Courses	$24.00 per qtr. hr.	$64.00 per qtr. hr.
Thesis		

Fees are based on the level of each course attempted. The dates by which fees must be paid for each academic quarter may be obtained from the University Cashier's Office. Current fee information can be obtained from the Cashier's Office.

NOTE: Registration is not complete until fees are paid. Fees are subject to change.

Sundry Fees

Application Fee (non-refundable)	$15.00
Late registration service charge (see academic calendar for dates)	$25.00
Library Fines–per book or unit per day	$ .25
Overdue Reserve Books–per book per library hour	$ .25
Parking Fee	$ 1.25
Reinstatement Fee	$25.00
Assessed all students whose registration has been cancelled for non-payment of fees, and who petition for reinstatement (in addition to the late registration service charge.)	
Student Health Fee	$ 5.00

Refunds

A full refund of fees will be made if a student withdraws completely from the University *on or before the last day of late registration.* A full refund will be made if the University cancels a student's registration before the end of late registration.

After the end of late registration there will be no refund of Registration Fees except in the following cases:

- Death of student
- Illness of the student so severe that it prevents completion of the program for which the student is registered. A doctor's certification of this illness is required.
- Involuntary call to military service.
- Extenuating circumstances.

In the above instances the per hour fee, less $2.85 per hour, will be refunded.

No refund will be made under this policy except upon proper application through the Cashier's Office.

Past Due Student Accounts

All student accounts are due and payable at the Cashier's Office, Room 120 Primera Casa, at the time such charges are incurred.

Delinquent accounts will be considered sufficient cause to prohibit registration, graduation, granting of credit, or release of transcripts for students. The University is not able to grant credit or time payments for any fees. Financial aid is available for those qualifying through the Office of Financial Aid. A limited number of short term loans are available to individuals who may experience problems in meeting due dates.

Financial Aid

Florida International University subscribes to the philosophy that a student is entitled to a college education regardless of his or her financial condition. The Office of Financial Aid (Tamiami Campus, Primera Casa; Room 125; North Miami Campus, Academic I, Room 186) have an extensive program of student financial aid which includes scholarships, grants, loans, and employment. Awards are based on need. Each application is given individual attention.

Assistance may be provided in the form of a scholarship, a loan, part-time employment, or a combination of all three in a "package." Florida International participates in the National Direct Student Loan Program, the Federal Nursing Student Loan and Scholarship Program, the Law Enforcement Education Program, the College Work-Study Program, the Florida Student Assistance Grant Program, the Supplemental Education Opportunity Grant Program and the Basic Educational Opportunity Grant Program. Forms for the Guaranteed Student Loan, a type of transaction between local lenders and the student, are also processed through the Office of Financial Aid. There is a nine month grace period before the student assumes payment of the loan. The government pays the interest while the student is in school and during the grace period.

In order to qualify for aid, a student must be fully admitted to the University as a degree seeking student. A new application for aid must be submitted each year. Forms are available in February for the following summer quarter and academic year. In order to receive priority consideration, a student must apply by the deadlines as established by the Financial Aid Office:

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1979–80 academic year;Summer Quarter – May 18, 1979, Fall Quarter – August 24, 1979, Winter Quarter – December 8, 1979, and Winter Quarter – February 19, 1980–81 academic year; Summer Quarter-May 23, 1980, Fall Quarter-August 22, 1980, Winter Quarter-December 5, 1980 and Spring Quarter-April 10, 1981. Apply as soon as possible. DO NOT wait until you have been accepted by the Office of Admissions and Records.

Before a financial aid application can be evaluated, students must do the following:

1. Complete a Financial Aid Form and mail it directly to the College Scholarship Service: the College Scholarship Service will send Florida International University a computerized version of the student's application, which is evaluated to determine his or her need.
2. Complete an office application and mail it to the Financial Aid Office.
3. Every transfer student must obtain and fill out a financial aid transcript form for each school previously attended, and have the Financial Aid Office of each school complete the form and mail it to Florida International University.
4. All students must submit a copy of their 1978 Income Tax Report to the Financial Aid Office. Dependent students will submit their parents 1978 Income Tax Report for the 1979–80 academic year. Students applying for the 1980–81 academic year must submit a 1979 Income Tax Report.

In accordance with guidelines set by the Office of Education (H.E.W.), all students receiving federal financial aid must be making satisfactory progress towards the completion of a degree; therefore, the Financial Aid Office has established that "measurable academic progress" will be met by completing 35 new credit hours per academic year (3 quarters) with a cumulative grade point average of 2.0 as a minimum.

In addition no aid will be awarded if the student has any outstanding debts with the University.

If a student is dependent and his or her family's gross income is less than $15,000.00, or if he or she is an independent student and his or her gross income is less than $15,000.00, the student is expected to do the following, assuming he or she meets the basic qualifications of the programs:

1. Apply for the Florida Assistance Grant Program. The student must be a United States citizen or permanent resident, and a Florida resident for at least 24 months immediately preceding the beginning of the academic year for which he or she is applying. The student must be enrolled for at least 12 hours per quarter.
2. Apply for the Basic Educational Opportunity Grant (BEOG) Program by answering yes to question No. 43 on the FAF (Financial Aid Form), and submit the Student Eligibility Report to Florida International University. The student must be enrolled for at least 6 hours per quarter.

Awards may be adjusted if the income of the student changes. Applicants who fail to notify the Financial Aid Office of assistance from other sources are subject to complete withdrawal of aid.

Please note that the opportunities for financial assistance are limited if a student is not a resident alien or a United States citizen.

Veterans Information

The Veterans' Affairs Office assists all veterans and their dependents who wish to receive V.A. educational benefits. Personal counseling, fee deferments, tutorial assistance, and V.A. work/study jobs are available through the Veteran's Affairs Office. The V.A. Office is located in PC 138 at the Tamiami Campus, and TC 113 at the North Miami Campus.

Veterans planning to attend F.I.U. should contact the Veteran's Affairs Office two (2) months prior to date of entry in order to expedite the processing of paperwork required to obtain educational allowances from the Veterans Administration.

TRAINING STATUS

	Undergraduate	*Graduate*
Full-time	12 quarter hours	9 quarter hours
3/4 Time	9 quarter hours	7 quarter hours
1/2 Time	6 quarter hours	5 quarter hours
Less than Half-Time	5 quarter hours	4 quarter hours

RATE OF PAYMENT

	No Dependent	*1 Dependent*	*2 Dependents*	*Each Additional*
Full-Time	$311.00	$370.00	$422.00	$26.00
3/4 Time	$233.00	$277.00	$317.00	$19.00
1/2 Time	$156.00	$185.00	$211.00	$13.00
Less than Half-Time	COST OF TUITION			

Student Affairs

The Division of Student Affairs includes several areas within the University which provide direct service to students outside the classroom. The Student Affairs Division is designed to directly aid students in obtaining an education at FIU and to provide a broad scope of opportunities to expand upon classroom knowledge. The student in all processes is the prime focus of Student Affairs; being admitted to FIU, receiving financial aid and counseling services, participation in student activities and sports programs, being involved in student leadership and governance, and securing career development and job placement.

Departments of the Division of Student Affairs at Tamiami are located on the second and third floors of University House, the first and third floors of Primera Casa, the Tower Building, and the Modular Building on the west side of the campus. At North Miami, Student Affairs offices are located in Academic I.

The following section lists some of the services available to you through the Division. If you have questions that are not answered here, visit any of the offices of Student Affairs for assistance.

University Public Safety Department

The Florida International University Department of Public Safety is a full service Public Safety organizational unit, dedicated to the maintenance of a peaceful and safe academic environment throughout the entire University community.

The protection of persons and property is the specific responsibility of the Department of Public Safety's police division. As State of Florida police officers, members of this unit have complete law enforcement responsibility for the University community. The university police division attempts to address the needs of the educational community through objective enforcement and quality Public Safety service provided around the clock.

Articulation and Recruitment

The Office of Articulation and Recruitment UH 340 works with the prospective students in an effort to make the transition to the upper-division university smoother. It also coordinates efforts with the University's academic departments to gain a better picture of their program requirements and to communicate those requirements to the community colleges.

The Office of Articulation and Recruitment serves as a focal point for those interested in expanding the University's constituency with special efforts in the recruitment of blacks, Hispanics, women, and senior citizens.

Orientation for new students is coordinated

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Student Affairs

in the Office of Articulation and Recruitment with cooperative efforts from the Division of Student Affairs. This program welcomes students, familiarizes them with a variety of services and provides them with an opportunity to complete registration.

Admissions and Records

The Office of Admissions and Records, under the direction of the University Registrar, is responsible for the orderly and timely admission of students, evaluation of transfer credits, and dissemination of information about academic programs of the University. It is in this office that the student academic record is created, maintained, and preserved, and from here are transcripts of the academic record sent. Registration for classes, including the dropping or adding of courses after registration is a function of Admissions and Records, and final grades are distributed by that office.

The office staff has the responsibility to serve the student, faculty, other administrative offices, and the general public; to hold safe and preserve the confidentiality of the students' records; and to ensure the integrity of the University's policies and regulations.

Financial Aid

The student financial aid program at Florida International University is part of the Student Affairs Division. Please refer to the Financial Information section of the catalog page for detailed information.

Off-Campus Housing

The Off-Campus Housing Program gives students at both the Tamiami and North Miami Campuses an extensive list of off-campus apartments, townhouses, rooms and houses for rent. The rental file is in University House 330, and Academic I 112. The file is updated every two weeks and offers information on units available in Miami neighborhoods, rental cost, amenities such as pools, as well as other rental arrangements.

All landlords in the listing sign an agreement stating that no discrimination will occur due to race, color, religion, national origin, handicap or sex.

The Housing Office offers personalized advice and counseling in choosing sound rental arrangements, as well as what to do in the case of difficulties; however, each student must apply for, select, and evaluate their housing accommodations. It is suggested that you come during the week, many apartment rental offices are closed on weekends.

A roommate listing exchange service assists students searching for a roommate to share housing, as well as companionship.

Maps and other information, such as the MTA countywide bus network, are free to students. Other pamphlets may be obtained at no charge, on a variety of consumer issues.

Counseling and Advising Services

Located in UH 340 on the Tamiami Campus and Academic I 105–110 on the North Miami Campus, Counseling and Advising Services offers the following services to any student attending FIU:

Counseling Services

Counseling Services offers a variety of counseling, advising, and testing programs for both individuals and groups. Academic counseling is provided to assist with the choice of a major or academic field of study, to advise for the improvement of study skills, to act as liaison with academic departments, and to serve as an advisement unit to facilitate matters with administrative divisions. Career Counseling is available to provide assistance in selection of and preparation for career-life planning, including individual exploration of interests, options, abilities, needs, and goals, as well as career opportunities. Personal counseling is also available for concerns such as personal growth and development, family problems, and social concerns. We also offer testing in the areas of academic achievement, personality inventories, interest inventories, and other pertinent areas. In addition, workshops and seminars are held periodically on topics of special relevance to students.

International Student Services

The International Student Services Office is organized to meet the special needs of international students, and to assist each student in achieving his or her educational objectives. The International Student Advisor serves as a liaison on immigration matters, and provides assistance with academic, financial, social and personal problems besetting international students. An orientation program is held at the beginning of every quarter to acquaint the incoming international student with the University, immigration regulations, and the community. As a means of orienting international students to American family life, an active Host Family Program is maintained. Also, in cooperation with the International Student Club, varied social and cultural activities are regularly scheduled. For example, "International Week," a week of festive activities, is held during each Spring term.

Several publications are provided to inform international students. An International Student Handbook is published annually, and "The Global Forum" (International Student Newsletter) is distributed each quarter. An admissions brochure is provided for prospective students interested in attending Florida International University.

Special Services and the Handicapped

Special arrangements have been made at Florida International University to serve the needs of those who have physical handicaps, chronic health problems, hearing disorders, visual disorders, or mental or psychological disorders. Special Services operates to provide information and assistance to disabled students attending or wishing to attend FIU. Services include counseling, assistance with registration and class schedules, special equipment, talking books, talking cassettes, cassette machines, electric typewriters, notetaker, and on campus attendants; and help in overcoming architectual, academic or other obstacles which the disabled student may encounter.

Learning Skills Development

Several special learning laboratories and/or programs have been developed to assist students with educational deficiencies or problems. The student retention program in conjunction with the academic affairs area sponsors both a Writing Lab and a Mathematics Lab at the Tamiami Campus. Free tutoring in Math, Statistics, and Computer Science is available in the Math Lab; free tutoring for students with writing problems is available in the Writing Lab. For further information about the Math Lab call the Mathematical Sciences Department at 552-2743; for further information about the Writing Lab call the English Department, at 552-2874.

A Writing Lab has also been established in Room 231–Academic I on the North Miami Campus.

Additional programs are planned for reading, language, speaking, study and library skills development. Special tutorial arrangements can be made as deemed appropriate or necessary. Testing to assess achievement levels, and placement into special learning programs are also functions of Learning Skills Development. The

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Student Affairs

Coordinator for Student Retention Programs and Learning Skills Development is located in the Counseling Services Department, UH 340 on Tamiami Campus and Rooms 104–105, Academic 1.

Career Placement

The Career Placement Department, UH 340 at Tamiami and Academic 1 102–103 at North Miami, assists students with career choice selections. Additionally, on-campus interviews are scheduled with employers. In order to assist students in preparing for employment, there are seminars each quarter in learning effective communication techniques for interviews with employers (resume writing, letters of introduction and application, developing interviewing techniques and skills, etc.).

The Career Placement Department maintains notebooks which list opportunities for part-time, full-time and summer employment. The department also uses bulletin boards to post information on employment vacancies and careers. One board is located on the first floor of UH; the other is in Academic 1 102–103 on the North Miami Campus.

Cooperative Education

Cooperative Education allows students to alternate quarters of full-time paid employment, for which academic credit is earned, with quarters of full-time study. Students work in professional-level training positions related to their major field of study. Interested students may obtain detailed information about cooperative education from their academic advisor or the Department of Cooperative Education/ Placement UH 340 at Tamiami or Academic 1 102–103 at North Miami.

Consortium Career Planning and Placement Services

Students and alumni of the three member institutions of the Southeast Florida Educational Consortium may request placement services at any of the nine Consortium campuses. *Procedure:* the student or alumnus should identify his or her campus (of graduation) at the time of requesting the service.

University House (Tamiami Campus)

University House is the primary student center and provides a focal point for the university community to meet and interact in a non-classroom, yet educational environment. As the hub of student life, UH houses the bookstore, cafeteria, Rathskeller, Cinema Center, Interjunational Conference Theater, student publications/communications offices, recreation rooms, TV lounges, Student Government Association offices, student organization offices, and meeting rooms. The Student Activities Office is located on the second floor. Some of the other offices of the Division of Student Affairs, including Career Development and Placement, Cooperative Education, Student Academic Services, International Student Services, and Articulation and Recruitment are located on the third floor.

Student Activities and Organizations

Student activities are designed to meet the varied needs and potentialities of Florida International students. Student activities programming is co-curricular, and extends the educational spectrum from the classroom into the work of student organizations, Student Government, and a myriad of events and activities throughout the year. Participation in student activities allows a student to gain the broadest possible scope of education during the time that he or she is at the University.

Organizations are continually being formed on both the Tamiami and North Miami Campuses. Students have the opportunity to develop groups that further social and service programs, promote and supervise student welfare, further educational goals, and coordinate and implement community/student cooperation.

Students who are interested in organizing a group or in joining one that exists should go to the Student Activities Office in University House 211 on the Tamiami Campus or in Academic 1, Room 100, on the North Miami Campus.

There are currently 70 registered student organizations on the Tamiami Campus, ranging from the Student Consumer Group, the Professional Commerce Association and the Student Art Association through the International Student Club, the Future Attorneys Association and the Mass Communications Club. Meetings for all student groups are posted on the glass directory boards and bulletin boards throughout the University, and are announced daily on Eventline, 552-2177. The Student Activities Office in University House 211 also has a master schedule of student meetings.

On the North Miami Campus, student groups are just in the process of forming. Students on NMC have a unique opportunity to have an impact on what groups become a part of campus life. The Student Activities Office can provide information on how to become involved with student organizations or activities, as well as information about what's happening on campus.

Consortium Student Activities

Current students may attend activities open to Consortium students at any campus of the University, Broward Community College, and Miami-Dade Community College.

Procedure: present student ID or current fee receipt. The three institutions arrange for block purchase of tickets to area cultural events for re-sale to students at less-than-box-office prices. The Consortium campuses also jointly schedule cultural events.

Intercollegiate Athletics

The Department of Intercollegiate Athletics and Recreational Sports offers varsity sports for both men and women. Men's NCAA intercollegiate athletics include baseball, golf, soccer, tennis and wrestling. Women's AIAW intercollegiate athletics include basketball, golf, softball, tennis and volleyball. The department is located in the Modular Building (W-4) on the west side of the Tamiami Campus, Room 201, telephone 552-2756.

Recreational Sports

The Recreational Sports Office is dedicated to serving the physical and leisure needs of the FIU community. Four areas of participation are offered: Club Sports, Intramurals, Leisure Activity Classes and Facilities available for student and faculty use.

Club Sports are structured organizations that meet on a regular basis for the purpose of enhancing activity interests. Club sports have been organized in cooperation with the surrounding community and other four-year colleges. This non-varsity program helps to promote goodwill among the colleges in the South Florida community. Clubs are sponsored in sailing, fencing, water skiing, karate, flying, judo, and men's and women's tennis.

A full program of *intramural* sports is offered each quarter, and all interested students are encouraged to participate. Both competitive and recreational leagues are available, free from excess time demands as in intercollegiate and club sports. Intramurals include softball, soccer, tennis, racquetball and bowling.

Most FIU students have a free noon period,

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Administrative Affairs

allowing enough time to get involved in a *leisure activity program,* take a shower, and get back to classes. A variety of athletic activities will be taught by members of the FIU athletic coaching staff. Short lectures and drills will compliment periods of participation and general overall fitness. Several night classes are also offered.

All athletic *facilities* are open to students, faculty and staff with the exception of times reserved for intercollegiate, intramural and other recreational sports. The facilities located on the west end of the Tamiami Campus are the Tursair Building (W-9)—wrestling, weight room and mats; Tin Gym (W-7)—basketball and volleyball courts; tennis, paddleball, racquetball and handball courts; putting green and chipping area, outdoor basketball courts and recreational fields. Locker rooms for men and women are available with proof of a valid University ID.

Facilities located on the North Miami Campus include a Parcourse physical fitness trail plus canoes and sailboats for limited recreational usage on Wednesday and Saturday afternoons.

The Recreational Sports Offices are located in the Modular Building (W-4), on the west side of the Tamiami Campus, Room 202, and on the North Miami Campus at the Student Development Center, TC-1140. For further information concerning any of the recreational sports programs, dial the Rec. Sports Hotline at 552-CALL, Monday through Friday, from 11 A.M. to 3 P.M.

Student Government

The Student Government Association (SGA), with offices on the Tamiami Campus in University House 310 and 311, and on the North Miami Campus, actively represents the student body within the university community. One of the functions of the SGA is to place all interested students on university-wide committees and task forces to insure student representation. Three of the most vital SGA standing committees are: the Social and Cultural Committee, which coordinates all concerts, lectures, film series and cultural and social activities involving students; the Budget Committee, which reviews and recommends, to the Senate, budget requests from registered student organizations and university departments; and the Committee on Committees, which reviews and screens student applicants for university-wide committees and recommends them to SGA for approval.

Students who have concerns they wish to express should go to the SGA office on either campus.

Governance

Students at Florida International are encouraged to participate in the governance of the University. The essential thrust of the University's philosophy is to provide an effective governance program that truly represents the students, the faculty, and the staff in developing institutional policies.

The governance of Florida International is intended to reflect common goals, and to bring honest differences of opinion out into the open. Through coordinated action and cooperation, students can be an effective force serving the total University community. Student concerns will be considered within the framework of the total governance of the University through student representation on all major University governing councils and committees.

Faculty and staff of Florida International actively seek to learn student desires and needs, which receive major consideration in decision-making processes at the University. At the same time, for effective two-way communication, it is important that students also give consideration to the view of faculty and staff. The University community must work together to meet the basic goals of the institution.

The elected Student Government Association is one of the four Senates in the University Council, the primary governance unit of the University.

Student Publications

On the Tamiami Campus, the Student Publications/Communications Workroom, University House 212A, provides the base of operations for all present student publications and any other communicative instruments that students initiate. In furthering the University's philosophy of linking practical experience with theory, student communications provide the opportunity for students to gain journalistic experience outside the classroom. A registered independent campus newspaper, an international magazine, a student handbook, and a yearbook presently exist on the Tamiami campus. Student publications welcome contributions from all segments of the University community and seek staff members as well.

On the North Miami campus also, the opportunity exists for students to initiate any publications they wish. Come to the Student Activities Office in Academic I 111, for further information.

Student Health Care

The purpose of student health services is to provide comprehensive health care to the students of F.I.U. at a level commensurate with the students needs.

The health clinic at the Tamiami Campus (located in O.E. 115) is staffed by full time registered nurses, a family nurse practitioner and a part-time physician. A full time registered nurse staffs the clinic on the North Campus and the nurse practitioner is available there one day a week.

The clinic on the North Campus will be located in Academic 1. Check with Student Affairs for location. Hours are posted in both clinics.

The clinics provide care for illnesses and emergencies. In addition preventive health care is emphasized. Health teaching in diet, exercise, stress management, and use of the health care system are integral parts of our program. Family planning, laboratory and physical therapy services are available.

For further information about special student insurance contact the Health Clinic on either campus.

Campus Ministry

Campus Ministry serves as a center for student groups on campus involved in a variety of religious activities. Professional representatives from various faiths are available for personal appointments. Often individual denominations will sponsor campus-wide programs under the auspices of the Campus Ministry. Hillel, the Jewish student center maintains a full time office within the ministry.

The office is open Monday through Friday from 9:00 A.M. to 5:30 P.M. (4:00 on Friday) and evenings as posted. Office location is Primera Casa 245, telephone 552-2215.

Food Service

Food and beverage service at Tamiami Campus is available on the first floor of University House. Snacks and complete meals are served cafeteria style. The cafeteria includes tables in the main area, surrounded by small dining rooms and patio dining areas. Food service offers complete catering service. North Miami Campus initially will be served by a variety of vending machines.

Administrative Affairs

Administrative Affairs at Florida International University exists to plan, facilitate, and

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Administrative Affairs

service the other areas of the University. It offers many services centrally for this multi-campuse University, providing the advantage of economy of scale. At the same time, recognizing the importance of *full service* to meet the needs of each individual campus. Administrative Affairs maintains fully functioning staffs of problem solvers at each location. Administrative Affairs operates the following nine service areas:

Staff Functions	*Service Operations*
Legal Affairs	Auxiliary Services
Physical Planning	Environmental Health and Safety Office
Internal Management Auditing Unit	Physical Plant Operations
Southeast Regional Data Center	University Controller
	University Budget Office
	University Personnel Services
	University Purchasing Services

Each area is described briefly below:

Auxiliary Services

The Auxiliary Services of the University are self-supporting entities that sell goods and services at a price that approximates the cost. Auxiliary Services operates and coordinates food service, bookstore, duplicating, central stores, and vending.

Environmental Health and Safety

The Environmental Health and Safety Office is responsible for compliance activities with Federal, state and local health and safety codes, rules, and regulations. Additionally, the office is responsible for coordinating Section 504 of the Rehabilitation Act of 1973, which includes developing, implementing, and monitoring programs designed to eliminate discrimination on the basis of disability.

Internal Management Auditing Unit

Internal auditing is an independent appraisal activity for the review of accounting, financial and other operations, as a service to University management. The overall objective of this Office is to assist all members of management in the effective discharge of their responsibilities, by furnishing them with objective analyses, appraisals, recommendations, and pertinent comments concerning the activities reviewed. This Office reports directly to the Board of Regents.

Legal Affairs

The Office of Legal Affairs is staffed by qualified attorneys licensed to practice law in the State of Florida. These attorneys provide all the necessary legal services for the University. The office has a legal library and can provide legal assistance in contractual and personnel matters as well as general legal advice.

Physical Planning

The Division of Physical Planning is responsible for the preparation, and implementation of the University's physical development program—this includes the programming, design, and construction of all major buildings and campus projects. This Division assists in the development and maintenance of long-range campus master plans; coordinates the preparation of all building programs; and serves as University liaison between the Board of Regents and metropolitan and local governmental agencies. In addition, the Division conducts studies on projected University needs, prepares space utilization reports, makes traffic studies, and formulates planning standards. A current inventory of all University facilities is maintained, including base maps, as-built drawings, and other development criteria essential to facilitating the University's accelerating construction program.

Physical Plant Operations and Maintenance

The Physical Plant Division plans, designs and constructs all renovations. It operates, maintains and repairs the physical facilities of both campuses and provides many ancillary services.

- Planning, Design and Construction—Within the guidelines of the University Master Plan, Physical Plant plans new facilities; completes engineering and design for construction, renovation and alteration projects; and administers construction contracts, generally for those projects costing less than $100,000.
- Maintenance and Grounds Departments—These units repair and maintain FIU buildings, roads, and grounds. They also undertake smaller alterations and construction projects, usually those costing less than $5,000.
- Campus Services and Custodial Departments—These departments provide myriad services, including: key issue; telephone service; furniture and equipment moving; set-up for special events; recycling of newspapers; cleaning of classrooms, laboratories, offices and common interior areas; and pest control services.
- Central Utilities—This unit provides air conditioning for the campus buildings, through the central chilled water system or packaged or window units.

Southeast Regional Data Center SERDAC

SERDAC was created to serve the computing requirements of both Florida International University and Florida Atlantic University (FAU). The Data Center provides instructional, research and administrative computing support to its user campuses via terminal access to the SERDAC computer. In addition, SERDAC provides computing support to other eligible educational and governmental institutions in the South Florida region.

The campus computer facilities, which provide both batch and timesharing access to the SERDAC computer system, are operated and controlled by FIU Computer Operations (a separate organization which is guided in policy formation by the Office of the University's President) and by a similar group at FAU.

SERDAC is guided in the formation of policy by a five-member policy board comprised of one member from the Board of Regents/Management Information Systems Office, and two members each from FIU and FAU. The SERDAC Director, who reports to the policy board, is responsible for the implementation of policy and the day-to-day administration of the Data Center. SERDAC is located in PC–549, 552–2700.

University Budget Office

Operating with an annual total budget approaching $40,000,000—a significant investment of monies from the public and private sectors of the economy—Florida International University delivers programs and services to the South Florida community. The University Budget Office is the focal point where the seemingly unlimited programmatic needs and limited fiscal resources are molded into manageable and accountable budgets. Through the preparation of legislative budget requests, annual operating budgets and comprehensive expenditure analyses, this office serves the University by constantly monitoring and coordinating the distribution of fiscal resources.

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Academic Affairs

University Controller

The Controller's Office is responsible for recording and reporting all University financial data. Functional areas within the Controller's Office include:

- CASHIER'S OFFICE–Effects collection of all University fees, including registration fees, short-term loans, library fines, and parking fees. The distribution of financial aid awards and the billing of students for past-due accounts are responsibilities of this office.
- CONTRACTS AND GRANTS–Prepares fiscal and financial reports; and analyses of all Federal, State and local grants, along with reviews of expenditures and budget for compliance with the grants.
- RECORD RETENTION–Inventories the various departments' files and sets up record retention schedules for data contained within the departments.
- GENERAL ACCOUNTING–Performs various bank and ledger reconciliations, and prepares annual financial reports and construction analyses and reviews.
- ACCOUNTS PAYABLE–Processes all University bills for payment. This includes travel reimbursements, consultants' fees, construction costs and other payments allowable under State law.
- CASH DISBURSEMENTS–Distributes payroll, petty cash funds.
- PAYROLL–Administers the University payrolls for faculty, A & P, career service and part-time employees.

University Personnel Services

The Department of University Personnel Services is responsible for the administration of uniform personnel policies. The Department performs the following service and support functions: recruitment, position classification, training, maintenance of personnel records, employee counseling and grievance adjustment, administration of the employee performance rating system and employee fringe benefit programs.

University Purchasing Services

Purchasing Services provides for centralized buying of all University supplies, equipment, and contractual services–and includes the following functions:

Central Stores supplies commonly used office supplies and equipment at substantial savings to University departments.

Central Receiving is the central delivery point for receiving all supplies and equipment purchased by the University from outside vendors.

Campus Mail processes all outgoing official University mail and distributes all incoming mail.

Property Control coordinates the accountability (inventory), transfer and ultimate disposal of all accountable property.

University Outreach and Services

Strongly committed to meeting the educational, professional and social needs of the community, the Office of University Outreach and Services strives to extend the rich resources of the University beyond the confines of classroom and laboratory. Through creative programming, innovative research and community-oriented activities, the varied divisions within Outreach serve a widely heterogeneous population.

Operating under the Office of Academic Affairs, University Outreach is composed of the following divisions: Division of Centers and Institutes, Division of Continuing Education and Division of Latin Affairs.

Division of Centers and Institutes

The Cultural and Human Interaction Center, created in 1972, through which more than one and one-half million dollars in federal funds have been brought to FIU focused on social action programming, is composed of the following non-traditional, field based projects:

The Coconut Grove Youth Project, beginning its fourth year of operation, is designed to impact the anti-social behavior of adjudicated youth in the Coconut Grove area and represents a vanguard University effort located directly in the community addressed to the problem of juvenile crime.

The ESAA Race Relations Project, an innovative training program for students and school system personnel in the Dade and Broward County Public School Systems, seeks to reduce student disruption, isolation, violence and substance abuse through techniques aimed towards easing racial tension and promoting alternative methods of negotiation and conflict resolution.

The Institute on Sexism holds conferences and training sessions on sexism and sexuality throughout the year and works closely with Dade County Public School System teachers, staff and administrators in implementing Title IX guidelines established to eliminate sex discrimination and sex-role stereotyping.

The Partners in Learning Project, focusing on the South Dade farmworker population, pairs individuals academically trained with those trained through life experiences in a creative educational approach to life planning, skill development, and enhancement of cultural heritage. Street Musicians, theatrical presentation, dialogues, and University resources all contribute to the project's planned development of information/education materials for farmworkers nationally.

The Elders Institute, located on FIU's North Campus, serves the retired and/or older-aged learner through a variety of approaches designed to provide life-long learning for enrichment, including non-credit short courses located on and off campus, educational counseling and guidance, opportunities for cultural enrichment and participation in community affairs, and a general support system for the unique needs of this population.

The Institute for Women's Research and Studies provides education services, credit and non-credit, in the areas of management, career and life planning, minority relations, and international studies for educational, industrial, business and medical organizations throughout the state of Florida. The Institute maintains an applied resource program designed to provide in-service support and counseling in the above areas.

In cooperation with the External Degree Program, the Institute sponsors external baccalaureate degrees in career-life planning and minority relations in industry.

The State University System Center for Labor Research and Studies provides educational services with and without academic credit, in the areas of labor and manpower studies, labor relations for management and union groups, and collective bargaining, with an applied research program designed to support instruction and consultation in the above areas. As a Type I Center of the State University System, the Center is authorized by the Board of Regents to provide programs and services throughout the State of Florida. Through the External Degree Program and the School of Technology, an external baccalaureate program and certificate program in Industrial and Labor Relations is sponsored.

The Occupational Institute, as part of the Center for Labor Research and Studies, serves handicapped individuals seeking re-entry into the labor market. The Institute provides paraprofessional and professional training and counseling in selected skills areas and job readiness.

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Academic Affairs

The Urban Educational Resource Center, to be developed in cooperation with the School of Education, is planned for implementation during the 1979–80 academic year. This Center's purpose is the conduct and dissemination of significant, relevant and useful research aimed at the resolution of critical problems in urban education. The Resource Center will work within the community to determine areas of needed research, matching University expertise with identified needs.

Division of Continuing Education

The primary responsibility of the Division of Continuing Education is to provide lifelong educational opportunities to members of the community through the University's Dade, Broward and Monroe service area.

The Department of Conferences, through a variety of non-credit activities in the form of workshops, seminars, conferences and short courses, seeks to meet the needs of certain professional, para-professional and lay groups as well as the community at large by integrating University resources with skilled professionals in the community in program development and implementation. Continuing Education Units (CEUs) are awarded for participation in non-credit activities.

The Department of Off-Campus and Weekend Credit Courses serves as the focal point through which community needs are expressed, identified and generated into credit courses and programs, utilizing appropriate University resources. The important and unique feature of the Department is that it provides regular and special courses and programs at locations and times which are most convenient for those who request and enroll in them.

Division of Latin Affairs

The Division of Latin Affairs serves as a liaison between the University and the Latin community and develops and administers programs and activities in the area of multilingual and multicultural studies.

The Tri-Ethnic Bilingual Program supports the bilingual education programs of the Dade County School System through the development of curricula designed to sensitize counselors and parents to the special educational needs of Hispanic children, while encouraging a more receptive attitude towards bilingual education.

The Hispanic Consumer Education Project addresses the educational needs of the Hispanic population as consumers and facilitates their access to mechanisms for securing consumer information and for pursuing various forms of consumer protection action. The project operates an office in the heart of the Latin community in the Latin Affairs Outreach office.

The Spanish Total Experience Language Laboratories (STELL), is a total learning experience in which participants are exposed to intensive language instruction and Hispanic culture in the form of two week laboratories. Offered in conjunction with the Department of Conferences, the laboratories are open to the community. Similar laboratories are being offered to the Dade County Public School System employees through contract with the system.

Faculty Scholars Program

The Faculty Scholars Program provides an opportunity for especially well-qualified high school graduates to complete the baccalaureate degree in two to three years, enrolling directly in the upper division university. Based on demonstrated academic performance and leadership potential, a limited number of gifted and unusual students will be invited to participate in this program offered by Florida International University. Each student selected for the program will be required to have a personal interview with the Faculty Scholars Director and will have to be accepted by the Admission Evaluation Committee. A Professor-specialist in the student's proposed field of interest will serve as the student's advisor-mentor throughout the undergraduate program. In addition to core requirements and departmental discipline courses, the student and his or her advisor will design an individualized course of study, and plan close interaction in research, seminars, and study with members of the faculty as well as visiting professors, to meet the necessary requirements for the baccalaureate degree. This early association with a distinguished scholar-teacher is intended to enrich the student's promise as a person, and his or her potential as a scholar and a professional.

For detailed information concerning the Faculty Scholars Program, contact Dr. Clair T. McElfresh, Director–DM 210–552-2893.

Nursing Program

A selected number of non-degree credit courses for professional nurses are offered at FIU. These courses are approved continuing education courses for the purpose of obtaining contact hours for the Florida Board of Nursing certification and relicensure requirements.

The courses are designed for students desiring upper division credits in nursing, with content related to the nursing process and management.

Non-credit continuing education conferences, workshops and seminars are offered by the Division of Academic Affairs, Department of Conferences, North Miami Campus. Further information is available by contacting:

Office of Academic Affairs
North Miami Campus
Florida International University
940–5700

		Quarter Hours
*Nursing Courses:		
NUU 3431	Nursing in Evolving Health Care Delivery System	3
NUU 3210C	Nursing Process I	4
NUU 3222C	Nursing Process II	3
NUU 4211	(NUR 425) Decision Making in Nursing Practice	2
NUU 4630	Introduction to Nursing Research	3
NUU 4230C	Nursing Process Applied to Individuals	5
NUU 4231C	Nursing Process Applied to Families	4
NUU 4232C	Nursing Process Applied to Communities	3

*The Nursing credit courses taken at Florida International University are not in any way related to prerequisite or transfer courses of a future degree program in the nursing major.

FAU-FIU Joint Center for Environmental and Urban Problems

The establishment in July 1972 of a Joint Center for Environmental and Urban Problems by Florida International University and Florida Atlantic University was based on the premise that many of South Florida's urban and environmental problems must be approached on a regional basis: that such problems know no political boundaries. The Joint Center Headquarters, which houses the office of the director, is situated in Fort Lauderdale with branch offices on the FIU and FAU campuses. The FIU office is staffed by an assistant director and research associates.

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Acdemic Affairs

Within the next decade, decisions must be made on such critical areas as transportation, pollution control, land use, housing, energy policy and conservation, growth management, and the design of a regional government system capable of effective problem-solving. As a catalyst in coordinating and supporting private and public efforts to solve some of these problems, the Joint Center concentrates on both research and service responsibilities.

Research

Applied research grants are awarded each year by the Joint Center to faculty of both Florida Atlantic University and Florida International University to do research on environmental and urban problems of current concern in the South Florida area. Besides this supported research at the universities, "in-house" research projects are conducted by the Joint Center staff. Examples of these supported research projects include: the study of noise pollution, the problem of heavy metal accumulation in Mid-Biscayne Bay, analysis of air and water samples in Dade and Broward counties, and consideration of the problems associated with nuclear plant siting. Research results, produced at the Joint Center and elsewhere, are made available to public and private agencies attempting to find and apply solutions to urban and environmental problems.

Service

As a service organization, the Center provides professional assistance, maintains inventories of needs and scientific manpower availabilities, disseminates information, and facilitates communication among groups concerned. Special effort is concentrated on providing services in the solution of urban and environmental problems which have an increasingly regional character.

Other Center activities include: 1) The publication of a bimonthly magazine, *Florida Environmental and Urban Issues;* 2) Sponsoring of seminars and conferences addressing such topics as solar and nuclear energy, air and water quality, land use planning, and resource recovery. (These are announced through the news media as they are scheduled.) 3) Facilitation of communication within/between citizens groups and public agencies, and provision of information as a basis of effective action.

International Institute for Housing and Building

In its early planning, Florida International University dedicated itself to the development of academic, research and service programs which would be of direct benefit to the Southeast Florida community which it serves. In addition, the central importance of housing construction and development in Latin America, the Caribbean, and developing nations throughout the world was recognized. The International Institute for Housing and Building was established by the Department of Construction, School of Technology to provide expertise in the design, engineering architectural and management aspects of construction.

The Institute emphasizes the following activities related to housing environment.

1. To initiate and carry out research on problems related to building planning and construction, considering especially the technological, economic, financial and managerial aspects of the topic;
2. To generate funds from outside sources to finance theoretical and applied research activities;
3. To disseminate the results of research projects and encourage their implementation;
4. To provide technical services to private and official organizations with a special emphasis on service to the housing production industries of South Florida and in an international context;
5. To act as an interface between new developments in Housing Science and their application in the field of housing and planning in South Florida and to assess their relevance to the housing industry;
6. To collect documents, and disseminate information on the latest advances in building science and housing;
7. To attract researchers of international stature and reputation to F.I.U. and South Florida;
8. To develop a learning environment in the area of building sciences relevant to the needs of low and medium-income people of the world;
9. To collaborate with other research institutes, government agencies, and universities to increase the effect of its research program;
10. To organize scientific meetings, symposia conferences, seminars, and workshops at F.I.U. and elsewhere;
11. To incorporate the use of alternative energy, energy conservation, and efficient use of natural resources in the planning of large projects, and to encourage the utilization of indigenous materials and labor sources;
12. To help implement programs to alleviate the impact of various disasters on housing including the coordination of disaster preparedness activities related to housing.

An underlying concern of the Institute is to establish an interdisciplinary environment in which many disciplines within the University and the community can arrive at feasible solutions to housing and building problems.

Consumer Affairs Institute

The Institute functions in a research, teaching, and service capacity. Its primary goal is to develop alternatives to the adversary/advocate system in the equitable solution of consumer affairs problems. Working on the peer level, it attempts to bring together representatives of consumers, business, government, labor and academia. The Institute is jointly sponsored by Florida International University and the University of Miami.

Libraries

The University libraries are housed in the Athenaeum on the Tamiami Campus, and in temporary quarters in the Trade Center Building at the North Miami Campus.

Some 400,000 volumes comprise the total library collection in addition to substantial holdings in federal, state, local, and international documents; maps; microforms; music scores; newspapers; institutional archives; and curriculum materials. The Library subscribes to approximately 4,000 scholarly journals and other serials.

The public card catalogs are divided into three sections for author, title, and subject entries. The location of the resources is given on the cards in each of the three sections of the catalogs. The bulk of the collection is housed in open stacks.

Classification of library resources is according to the Library of Congress system, except for some of the documents and special collections (e.g. U.S., Florida, and U.N. documents, archives, etc.) which are arranged by their own

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Academic Affairs

classification systems and have separate public catalogs.

In keeping with the University's commitment to day and night operation, the libraries are open when the University is in session and during vacation periods. For exact library hours, please consult the posted schedules. Staff members are always available at the Public Service desks to assist students and faculty in their use of the libraries.

Consortium Library Privileges

Currently registered students, faculty, and staff may use the libraries on any of the nine campuses of Broward Community College, Florida International University, and Miami-Dade Community College, including having access to periodicals and other materials not on open shelves. Some materials are placed on reserve to restrict their use. Each library has the periodical lists of the other consortium campuses.

Students may borrow materials from any of the consortium campuses through inter-library loans arranged at their home campus libraries. *Procedure for requesting an inter-library loan: Students* present a valid fee receipt or student ID for the current registration period; *faculty* present current staff identification.

Faculty and staff may also check out materials at any campus library of the Consortium. *Procedure for check-out:* present current staff identification.

Media Center

The Media Center offers service to faculty, staff and students, and is located in Athenaeum, with support facilities in Viertes Haus and Primera Casa 236 on the Tamiami Campus, and the Trade Center 125 and Academic 1 193 on the North Campus. Media services are provided through the following divisions: AV Equipment; Media Center Film Library; Learning Resources; and Instructional Graphics. Branches of AV Equipment and the Media Center Film Library exist on the North Campus. Special services that are not available on the North Miami Campus may be provided through coordination with the Director of Media Centers at the Tamiami Campus.

Faculty may seek assistance in the development of instructional support in any AV medium. Film librarians acquire films, audio/video tapes, and instructional kits. Films, tapes and kits can be scheduled through the Film Library. A language lab is also located in this area. The Equipment Distribution Center purchases and maintains all AV equipment for the university, as well as delivering AV equipment to classrooms. Graphic artists and photographers assist faculty and staff in the preparation of desired instructional visual support. A Learning Resources specialist is available for consultation and production support. Faculty and students may prepare graphic materials in the Faculty/Student Production Center, with the assistance of an Audio-Visual Specialist.

Questions regarding Media Center services may be directed to the Main Offices on either campus.

Consortium Media Privileges

Faculty, staff, and students may use the audio-visual services on any campus of the Consortium. A-V materials and equipment may not be borrowed.

State University System External Degree Program

The Florida Board of Regents has authorized Florida International University to administer the State University System External Degree Program. This statewide authorization enables students to take advantage of all educational resources throughout Florida, without requiring residency on any campus. It is a self-directed, non(campus) residential program for residents of the State of Florida.

Individual degree plans are designed for each student in the form of an Educational Contract. In the Contract, the student is awarded credit for previous academic experience and for prior experiential learning. The Contract also specifies the program of study, outlining what remains to be done for the completion of a baccalaureate degree. Students may enroll in the program and begin their course of study at any time. The length of time required for each student to complete the bachelor's program will vary according to the amount of credit needed for completion and the speed at which the individual student wishes to work.

Programs Offered

The External Degree Program is operated through the faculty of the regular departments and divisions in Florida International's college and schools. The degrees offered are the same degrees as the regular degrees offered by the college and the schools, but they are achieved through alternative means. Degrees offered by the College of Arts and Sciences, the School of Public Affairs and Services, the School of Technology, the School of Business and Organizational Services, and the School of Hospitality Management may be earned through the External Degree Program.

Credit for Prior Experiential Learning

Many persons have accumulated non-college learning experiences that can be translated into college credit. By various methods of evaluation, our faculty is able to assess a student's competence level and grant advanced standing accordingly. Methods of evaluation range from the standardized College Level Examination Program (CLEP) to individual written and oral presentation before persons with established credentials in the disciplines under consideration. There is no minimum or maximum number of credits the faculty may award.

Examples of work and other prior experiential learning which may be considered for credit are: in-service training, short courses, continuing education, correspondence studies, seminars, travel, and professional occupational experiences.

Entrance Requirements:

1. Florida Residency.
2. Completion of two years of college studies or the equivalent.
3. Commitment to independent study.
4. Submission of detailed application forms.
5. Acceptance as an External Degree student by the desired department.
6. An initial interview.

Fees

Contract Fees: $200.00 per year
Tuition Fees: $16.50 per quarter hour of undergraduate credit. All formal coursework and Independent Study detailed in the Educational Contract is paid for at this rate.
Contract fees cover the following costs:

1. Evaluation of application.
2. Counseling and interview procedures.
3. Assessment and awarding of credit for prior learning.
4. Individualized educational program.
5. Writing of the Educational Contract.

(Continued)

University Relations and Development

Division of Sponsored Research and Training

The Division of Sponsored Research and Training serves the research and training needs of interested faculty by providing timely information on the availability of local, State and Federal program support. The attraction of these funds to the campus provides an opportunity to better serve the needs of the people of Florida through services not regularly funded by the Legislature.

Among the major goals of the Division of Sponsored Research and Training are the following:

to help stimulate faculty and staff interest in research and training projects

to assist the faculty and staff in obtaining funds for research and training projects, and

to provide technical assistance to faculty and staff who submit proposals to the Division for the University.

International Affairs Center

A primary goal of Florida International University is to become a major international education, training, and research center. The University's mandate extends beyond the education of Floridians and service to the South Florida community, to the creation of mutual understanding among the Americas and throughout the world.

Florida International University is dedicated to international education in the forms of academic research, teaching, service, and cooperative exchange. The focus of the international thrust of the University is the International Affairs Center. The function of the International Affairs Center is to conduct research, development, and joint programs in cooperation with all elements of the University, in international education, research and training.

In order to expose Florida International University students to the dynamics of United States participation in world activities, and to the equally critical roles played by other countries in the world scene, the University encourages the offering of internationally oriented courses. To that end, Florida International University currently provides degree majors and certificate studies programs encompassing international dimensions in the following areas:

College of Arts and Sciences

International Economics and Development major
International Relations major
Liberal Studies major
Modern Language majors
Earth Sciences major
1—Certificate in Caribbean Studies
PoliticalScience major
Ethnic Studies Certificate Program
1—Cuban Studies Certificate
2—Jewish Studies Certificate
Caribbean-Latin American Studies Certificate Program
1—Academic Certificate in Caribbean Studies
2—Professional Certificate in Caribbean Studies

School of Business and Organizational Sciences

International Business major (undergrad.)
Business Administration major (undergrad.)
International Marketing Concentration
Master of Science in Management: Finance
International Finance Specialization
Master of Science in Management: Accounting
International Finance concentration
International Accounting Program
Taxation specialization
Master of Science in Management: International Business

School of Education

Bilingual Education
Comparative Education
International Development Education

In addition, the School of Hospitality Management offers a program in International Hotel Management, and the School's Travel and Tourism Management program has a strong international component.

Integral to Florida International University's international curriculum is attraction of world renowned faculty to the University, and the participation of Florida International University faculty members in international activities on campus and abroad. Noteworthy efforts of the faculty and staff include cooperative projects with the Bahamas, Colombia, Haiti, Mexico, Venezuela, and Brazil.

By providing research, training, development and joint delivery of education, research and training programs with the College of Arts and Sciences and the Schools of the University, the International Affairs Center concentrates on the delivery of solutions to the academic and pragmatic problems and challenges facing the international community. The staff of the Center serves as planners, researchers, developers, advocates, and administrators for all international dimensions of the University. A fundamental principle of the Center's operation is that the most productive and valuable international activities are those which are multidisciplinary. Priority emphasis is given to those efforts in which two or more schools or departments of the University can be involved.

The Promotion of faculty and student research and study abroad is also a function of the Center. In this regard the Center acts as a clearinghouse for International programs sponsored by the University and by other organizations such as the State University System, various public agencies, and other universities in the United States and abroad. An adjunct to the Center's efforts to internationalize all aspects of the University is the admission of students from all over the world to Florida International University through the office for International Student Services. International students from the Caribbean, South and Central America, Africa, Europe, Southeast Asia, the Far East, Near and Middle East, and Oceania are studying at Florida International University. Currently, fifty-nine countries are represented in the Florida International University student body. The International Student Services Center works closely with the International Affairs Center in facilitating the admission to Florida International University of students from abroad.

The endeavors of Florida International University and its International Affairs Center are a demonstration of the Institution's commitment to cooperative participation in service to the world

University Relations and Development

The division fosters internal and external communications and involvement in a variety of ways with the goal of fully informing interested publics with current information about all facets of the University, our impact in the communities we serve, our future goals and continuing progress. Six interrelated departments provide University-wide services in the areas of public information, publications, the coordination of special events, alumni affairs and Development and general university public relations on both Tamiami and North Miami campuses.

Department of Development

Contributions of financial resources such as bequests, cash donations, equipment and endowments for the advancement of the University from national and local non-governmental

(Continued)

Florida's Statewide Course Numbering System

sources are solicited through this department. The "margin of excellence" that distinguishes a great university from an adequate university is encouraged and provided through the activities of the Foundation.

The Florida International University Foundation, Inc.,is composed of business and professional leaders of the community who have dedicated themselves to furthering the University by encouraging, soliciting, receiving and administering donations for the benefit of the institution. Auxiliary units of the Foundation include:

International Society of the Arts was established to encourage interest and support in the fine arts programs of the University. Persons from the Greater Miami area seek funding for student scholarships and the betterment of the cultural arts.

The Sunblazers Club seeks financial aid and support for the athletic programs of the University with the goal of providing a superior sports and recreation program for University students.

Department of Alumni Affairs

Although FIU is still a young institution, it has graduated over 14,000 students and nearly 50,000 persons have taken courses at the University. The Alumni Association, an auxiliary of the FIU Foundation, Inc., maintains liaison with FIU alumni to solicit their support for the University's growth, to encourage alumni to continue their post-secondary education and to establish a series of projects, activities and services of mutual benefit to the alumni and the University.

Department of Information Services

Writers and media specialists in this department inform the various external publics and University personnel of current events and activities. They distribute daily news releases to all professional media, publish a weekly newsletter which is disseminated to both the internal and external communities and maintain the University Speakers Bureau to provide high-quality University speakers on a wide variety of topics for any community group or organization.

Department of Publication Services

Creative graphic design and publications production personnel in this department coordinate the preparation of hundreds of publications to convey information about University programs, activities and services to selected and general audiences.

Department of Special Events

Providing service to the various publics of the University through promotion of attendance at special events such as lectures, plays, concerts, athletic events, commencements, and other public functions is the goal of this department. Special Events also schedules and coordinates high visibility events for the University including FIU's hosting of the annual Orange Bowl Marathon.

Office of Minority Affairs and Women's Concerns

The office reports to the President and provides leadership and direction in the administration of University equalization programs for women and minorities in several ways. It assists University units in implementing and monitoring affirmative action-procedures; provides a channel for employee and student grievances regarding discrimination, or issues that indicate the need for additional affirmative action; and promotes effective relationships between the University and community organizations. We also administer the State University System Scholarship Program and the internal Minority Scholarship Program. In addition, the office maintains a liaisonal relationship with state and federal agencies that deal with EEO and Affirmative Action.

Office of Institutional Research

The Office conducts research and evaluations related to the internal operations of the University, and analyzes and reports University statistics to federal and state agencies and other relevant groups. A member of the Office serves as University data administrator, responsible for coordinating the completion of all data requests made by the Florida Board of Regents and most data requests from all other sources.

The Office publishes a variety of reports on a regular basis. Those with widest applicability deal with student characteristics and student enrollments, both actual and projected.

The Office has the responsibility of overseeing the quality of questionnaires which are distributed within the University, and provides support services for those conducting studies.

Additionally, through the use of an on-site demand terminal and special data files created for its use, the Office responds to ad-hoc requests for information from University committees, individual faculty members, administrators, and students.

Florida's Statewide Course Numbering System

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three digits.

The classifying and numbering of courses was done by community college and university faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions who made suggestions and criticisms to be incorporated into the system.

The course numbering system is, by law, descriptive and not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty and other interested users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three digits as a course at the receiving institution. For example, if a student has taken SOC 000 at a community college, he cannot be required to repeat SOC 000 at the school to which he transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a

(Continued)

Florida's Statewide Course Numbering System

state university can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using *non-equivalent* courses for satisfying certain requirements.

General Rule for Course Equivalencies

All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in over 40 post-secondary institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SOC 000.

First Digit

The first digit of the course number is assigned by the institution, generally to indicate the year it is offered—i.e., 1 indicates freshman year, 2 indicates sophomore year. In the sociology example mentioned above, one school which offers the course in the freshman year will number it SOC 1000; a school offering the same course in the sophomore year will number it SOC 2000. The variance in first numbers does *not* affect the equivalency. If the prefix and last three digits are the same, the courses are substantively equivalent.

Titles

Each institution will retain its own title for each of its courses. The sociology courses mentioned above are titled at different schools "Introductory Sociology," "General Sociology," and "Principles of Sociology." The title does *not* affect the equivalency. The courses all carry the same prefix and last three digits; that is what identifies them as equivalent.

Lab Indicators

Some courses will carry an alpha suffix indicating a lab. The alpha suffixes "L" and "C" are used as follows to indicate laboratories:

"L" means either (a) a course, the content of which is entirely laboratory or (b) the laboratory component of a lecture-lab sequence in which the lab is offered at a different time/place from the lecture.

"C" means a combined lecture-lab course in which the lab is offered in conjunction with the lecture at the same time/same place.

Examples:

Marine Biology	OCB 013 (lecture only)
Marine Biology with lab	OCB 013L (lab only) OCB 013C (lecture and lab combined)

Therefore, OCB 013C is equivalent to OCB 013 plus OCB 013L.

Equivalency of Sequences

In certain cases, sequences of courses in a given discipline are equivalent rather than the individual courses which make up these sequences. (For example, MAC 132, 133, 134). In these cases the subject matter topics may not be taught in the same sequence, course by course, in several institutions; however, upon completion of the full sequence at any of the several institutions, students have completed substantively equivalent content. These sequences are clearly identified in the Course Equivalency Profiles.

Explanation of Prefixes and Numbers

Prefixes and numbers in the course numbering system are not chosen at random; they are designed to describe course content in an organized fashion within a classification system developed for each subject matter area.

Generally, each of the major classifications in a discipline is represented by a three-alpha prefix. In some cases, one three-alpha prefix has been sufficient for the entire discipline. A discipline may use as many prefixes as necessary to accommodate its major classifications. The logic of the system allows it to be infinitely expandable with minimal disruption to existing numbers.

History, for example, has seven prefixes: AFH, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, History-General; LAH, Latin American History; and WOH, World History. All history courses in the state will carry one of these prefixes.

The number of prefixes is a function of the extent of the subclassifications of the given subject matter area.

When this work began there were 920 alpha prefixes in existence; with the new system there are now 370. As in most states there existed no uniformity in Florida's prefixes as indicated by the example below:

Discipline	*Before*	*After*
History	20	7
Sociology	24	3
Philosophy	23	4
Religion	17	1
Mathematics	50	10
English	39	6
Nutrition	38	4

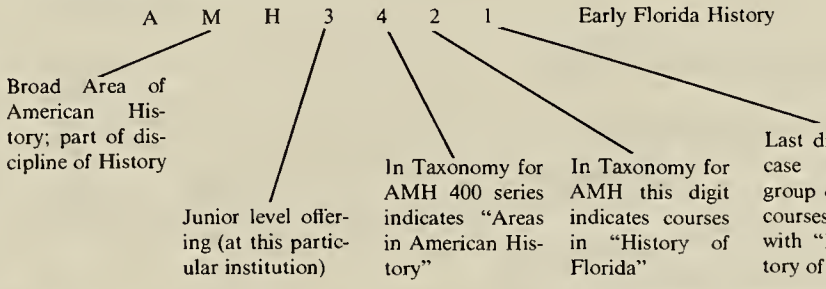
Although it is true that a student majoring at one of the 38 participating institutions may have had only one alpha prefix for his major (e.g., HY-History) and now he will have seven, all prefixes in the same subject matter areas will be the same throughout these institutions.

A complete inventory of taxonomic listings, equivalent and unique courses has been made available to each academic department of every institution in the state. Students, through their local advisors, should use this information in designing programs which will transfer smoothly.

Exceptions to the Rule for Equivalencies

The following are exceptions to the general rule for course equivalencies:

A more specific example is AMH 3421.



(Local titles are used for each particular course. The last three numbers are used to indicate equivalency.)

(Continued)

Administration and Staff

A. All graduate level courses (except those which the faculty and their reviewing colleagues have determined to be substantively equivalent with undergraduate courses) are not automatically transferable.

B. All numbers which have a second digit of 9 (Ex.: ART 2906) are "place keeper" numbers for such courses as directed independent study, thesis hours, etc. Courses with 900 numbers must be evaluated individually and are not automatically transferable.

C. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.

D. Performance or studio courses in Art, Dance, Theatre, and Music are not automatically transferable, but must be evaluated individually.

Authority For Acceptance of Equivalent Courses

The following amendment to Section 6A-10.24(7) of the Articulation Agreement was approved by the Community Colleges Council on Instructional Affairs, the Presidents Council, the Division of Community Colleges, the State University System Council of Vice Presidents for Academic Affairs the Council of Presidents and the Board of Regents. It was adopted by the State Board of Education on March 7, 1978: ". . . Students who earn credit in a course determined by the appropriate faculty task force to be equivalent and which is published in the state-wide course numbering system, and who later transfer to another institution within the system can transfer and use the credit in that course at the receiving institution for the same purpose as that course can be used by native students who complete the course at the receiving institution."

Administration, and Staff

Office of the President

President **Gregory Baker Wolfe**
Director **Patricia Lutterbie**
Computer Services Operations, Director **Charles Beranek**
Institutional Research and Analysis, Director **James Howell**
International Affairs, Dean **William Leffland**
Joint Center for Environment and Urban Problems, Director **John DeGrove**
Associate Director **John Parker**
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Southeast Florida Educational Consortium, Director **Richard Konkel**

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Associate Vice President **Steven Altman**
Assistant Vice President **Paul D. Gallagher**
Associate Vice President, University Outreach **Marvin Dunn**
Assistant Vice President, North Miami Campus **Rosebud L. Foster**
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International Institute for Creative Communication, Director **Edmund G. Skellings**
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Sponsored Research and Training, Director **Arnhilda Gonzalez-Quevedo**
State University System External Degree Program, Director **Isaiah Palmore**

Library and Media Center, Tamiami Campus

Director of Libraries and Media Services **Howard W. Cordell**
Associate Director **Clifford G. Dawdy**
Head, Public Services **Muriel C. Efron**
Head, Circulation Dept. **Sherry Carrillo**
Head, Curriculum Laboratory **Ronald W. Martin**
Documents Librarian **Josephina H. Rodriguez**
Environmental and Urban Affairs Librarian **Esther B. Gonzalez**
International Affairs Librarian **Marian Goslinga**
Head, Reference Dept. **Margaret S. Tripp**
Assistant Reference Librarian **Cornelia Sturdza**
Assistant Reference Librarian **Richard S. Cook II**
Head, Special Collections **Herlein M. Dunbar**
Head, Acquisitions Dept. **H. Juanita Flanders**
Head, Catalog Dept. **Jacqueline M. Zelman**
Assistant Catalog Librarian **Maria A. Berenbaum**
Associate Catalog Librarian **John R. Radencich**
Associate Catalog Librarian **Robert Mead-Donaldson**
Assistant Head, Catalog Dept. **Robert D. Rodriguez**
Head, Serials Dept. **Caroline J. Barker**
Associate Serials Librarian **Calvin A. Burkhart**
Director, Instructional Media **Arthur D. Waugh**
Director, AV Media **Edward J. Briois**
Director, Instructional Graphics **Marshall Kaufman**
Learning Resources Specialist **Elizabeth Puckett**
Media Center Librarian **Ellen Barnett**

Library and Media Center, North Miami Campus

Associate Director **Antonie L. Baker**
Head, Catalog Dept. **Robert E. Stack**
Head, Circulation Dept. **Susan Mead-Donaldson**
Head, Acquisitions Dept. **Leslie V. McCammon**
Curriculum Laboratory Librarian **Barbara A. Sudano**
Head, Reference Dept. **Miguel M. Menendez**
Assistant Reference Librarian **Susan R. Weiss**

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Latin Affairs, Director **Miguel Gonzalez-Pando**
Continuing Education, Director **Douglas Spencer**
Off Campus & Weekend Credit Courses, Assistant Director **Carolann Baldyga**
Center for Labor Research and Studies, Director **John Remington**
Coconut Grove Crime Prevention Project, Director **Dee Dunn**
Elders Institute, Director **Doris Bass**
ESAA Race Relations Project, Director **Magaly Rodriguez O'Hearn**
Institute for Women, Director **Charlotte Tatro**
Institute on Sexism, Co-Directors **Tom Puroff, Doris Stein**
Partners in Learning Education Project, Director **Magaly Rodriguez O'Hearn**
Tri-Ethnic Bilingual Program, Director **Sandra Gonzalez**

Administrative Affairs

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Internal Management Auditing Unit, Director **Andy Fornaguera**
Legal Services, Director **Joan Russell**
Physical Planning, Director **Daniel P. D'Oliveira**
Physical Plant Operations and Maintenance, Director **Donn L. Ashley**
Southeast Regional Data Center, Director **James E. Helm**

(Continued)

Administration and Staff

University Budget Office, Director Sidney L. Walesh
University Controller Thomas J. Breslin
University Personnel Services, Director James F. Flood
University Purchasing Services, Director Doris Sadoff

Student Affairs

Vice President for Student Affairs Judy M. Merritt
Assistant Vice President Ozzie Ritchey
Associate Dean Ralph Hogges
Assistant Dean Karel King
Division Budget Officer John Newman
Articulation & Recruitment Diann Zeldman
Cooperative Education & Placement Patrick Russell, Olga Martin
Counseling & International Student Services John Bonanno
Financial Aid John Newman, Ana Sarasti
Intercollegiate Athletic & Recreation Sports Thomas Wonderling, Nancy Olson
International Admissions Carmen Alvarez Brown
International Placement Ben Cowins
Records & Registration Lourdes Meeneses
Retention and Learning Skills Howard Wade
Student-Academic Services and Off Campus Housing Sharon Gottlieb
Student Activities and Student Union Thomas Riley, Cheryl Altany-Straus
University Department of Public Safety William Raimond
University Registrar Columbus H. Posey

University Relations and Development

University Relations and Development, Dean Terry Spence
Alumni Affairs Joanne Hayek
Annual Giving, Director Frances Koestline
Publications, Director Eileen Marcus
Special Gifts, Director Sharon Collins
Special Events and Information Services, Director Lillian Kopenhaver
University Relations North Miami Campus, Director Betty Bigby-Young

Academic Affairs, Administrative Affairs, Student Affairs, staff

Altman, Steven, D.B.A. *(University of Southern California), Associate Vice President for Academic Affairs*

Argudin, Juan, B.T.I.T. *(Florida International University), Director of Auxiliary Services, Administrative Affairs*

Arrowsmith, Ronald G., B.S.B.A. *(University of Florida), Vice President, Administrative Affairs*

Ashley, Donn L., P.E., M.A., *(The George Washington University), Director of Physical Plant*

Baker, Antonie L., M.A.L.S. *(University of Wisconsin at Madison), Associate Director, Library, North Miami Campus*

Baldyga, Carolann, M.A. *(Trinity College),* **M.E.D.** *(University of Mass.), Assistant Director, Continuing Education, Off-Campus and Weekend Credit Courses*

Barker, Caroline J., M.S.I.S. *(University of Illinois), Serials Librarian, Library*

Barnett, Ellen, M.S. *(Florida State University), Audio-Visual Librarian*

Bass, Doris, M., M.S.Ed. *(Florida International University), Director, Elders Institute*

Berenbaum, Maria, M.L.S. *(University of California at Los Angeles), Assistant Catalog Librarian, Library*

Blucker, Judith A., Ph.D. *(Florida State University), Womens Softball Coach*

Breslin, Thomas J., B.A. *(University of South Florida), Controller, Administrative Affairs*

Briois, Edward J., B.S.M.E. *(University of Florida), Director of Audio-Visual Media*

Burkhart, Calvin A., M.L.S. *(University of Pittsburgh), Assistant Serials Librarian, Library*

Carrillo, Sherry, J., M.L.S. *(Florida State University), Circulation Librarian, Library*

Collins, Sharon, M.A. *(Florida Atlantic University), Director, Community Development*

Cook, Richard S., II, M.L.S. *(University of Denver), Assistant Reference Librarian, Library*

Cordell, Howard W., M.S.L.S. *(University of Illinois), Director of Libraries and Media Services*

Cowins, Benjamin, Ph.D. *(University of Oklahoma), Director, Student Development, North Miami Campus*

Dagraedt, Mary V., M.S. *(Illinois State University at Normal), Womens Golf Coach*

Dawdy, Clifford G., M.E.D., M.L.S. *(N. Texas State University), Associate Director, Library,* Tamiami Campus

D'Oliveira, Daniel P., M.S. *(Columbia), Director, University Physical Planning*

Dunbar, H. Minnie, M.S.L.S. *(University of Illinois), Special Collections Librarian, Library*

Dunn, Dee, M.S. *(Biscayne College), Director, Coconut Grove Crime Prevention Project, University Outreach and Services*

Dunn, Marvin, Ph.D. *(University of Tennessee), Associate Vice President, University Outreach and Services*

Efron, Muriel C. M.S. *(Drexel University), Assistant Director Public Services, Library*

Eisner, Toni, Ed.D. *(University of Miami), Director of Centers and Institutes, University Outreach and Services*

Fisher, Robert C., Ph.D. *(University of Kansas), Vice President for Academic Affairs*

Flanders, H. Juanita, Ph.D. *(Bowling Green State University), Head, Acquisitions Dept.*

Flood, James F., B.A. *(University of South Florida), Director, Personnel Relations*

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Fornaguera, Andy, B.B.A. *(University of Miami), Director of Internal Management, Auditing Unit*

Gallagher, Paul D., Ph.D. *(Florida State University), Assistant Vice President for Academic Affairs*

Gonzalez, Esther B., M.L.S. *(Kansas State Teachers College), Environmental and Urban Affairs Librarian, Library*

Gonzalez, Sandra, M.S.Ed. *(Florida International University), Director, Tri-Ethnic Bilingual Program*

Gonzalez-Pando, Miguel, A.B.D. *(Harvard University), Director of Latin Affairs*

Gonzalez Quevedo, Arnhilda, Ph.D. *(University of North Carolina at Chapel Hill), Director, Division of Sponsored Research and Training*

Goslinga, Marian, M.S. *(University of California), Associate Librarian, Library, Int'l Affairs Librarian*

Helm, James E., B.S.B.A. *(University of Nebraska), Director, Southeast Regional Data Center*

Huitema, Jr., Sidney J., M.A. *(Michigan State University), Head Wrestling Coach, Athletics*

Hunsicker, Gerald H., M.A. *(Florida International University), Assistant Director of Athletics and Assistant Baseball Coach*

Kaufmann, Marshall L., M.A. *(Trinity University), Director of Instructional Graphics*

King, Karel S., M.Ed. *(Bowling Green State University), Assistant Dean, Student Affairs*

(Continued)

Introduction

College of Arts & Sciences

The College of Arts and Sciences is a Liberal Arts College. As such, it furthers the study of fundamental intellectual disciplines and renders service to the professional schools.

The Administrative units of the College offer departmental programs of study leading to bachelor degrees in biological sciences, economics, English, history, international relations, mathematical sciences (mathematics, statistics, computer science), modern languages (French, German, Italian, Portuguese, Spanish), performing arts (music, theatre), philosophy/religion (philosophy and/or religious studies), physical sciences (physics, chemistry, earth sciences, environmental studies), political science, psychology, sociology/anthropology, and visual arts.

The College also offers collegiate programs of study leading to bachelor degrees in humanities and liberal studies. Students may earn certificates, authorized by the College in Ethnic Studies, Caribbean/Latin American Studies, Consumer Affairs, Linguistics Studies, Marine Science, and Western Social and Political Thought.

A condition for any bachelor degree in the College requires that at least ten (10) quarter hours of elective credit stipulated in each academic major program be earned through course work taken outside the department sponsoring the program. A grade of C or better must be obtained in all courses required for the major. Moreover, students are encouraged to consider the possibility of taking a minor or certificate program besides their major, in order to enhance the liberal quality of their education.

Admission

A student holding an Associate degree from a community college (or having completed the equivalent course work at a four year school) will be admitted to the program of his or her choice. The college will also serve students who need to complete general education requirements or certain other requirements in order to enroll in specific discipline or professional programs.

Anthropology Major

Anthony Maingot, *Chairperson and Professor*
James Mau, *Dean, College of Arts and Sciences and Professor*
Jerald Brown, *Associate Professor*
Stephen Fjellman, *Associate Professor*
Randy Kandel, *Associate Professor*
Barry Levine, *Associate Professor*
William Osborne, *Associate Professor*
Judith Hoch, *Assistant Professor*
Shearon Lowery, *Assistant Professor*
William Vickers, *Assistant Professor*

Anthropology is part of the Department of Sociology and Anthropology and all information should be obtained from that Department's office.

LOCATION: Tamiami Campus

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION: Ninety quarters hours (60 semester hours) or the Associate of Arts degree from a community college (work should be pre-Arts and Sciences or pre-Anthropology or Sociology if such programs exist.) If the student does not have an AA degree, his background must reflect an ability to handle advanced academic work.

Required Courses: Introduction to Cultural Anthropology, or Introduction to Physical Anthropology, or Introduction to Sociology. If these courses are not completed prior to entry to FIU, they will be required as a part of the upper division program.

Recommended Courses: (1) other anthropology courses, (2) ecology, economics, geography, history, political science, psychology, (3) arts, biology, English, foreign languages, mathematics, philosophy.

UPPER DIVISION PROGRAM:

		Quarter Hours	
Required Courses:			**45**
Core Courses:			**20**
ANT 3086	Anthropological Theories	5	
SOC 3610	Sociological Theories	5	
SOC 3500	Research Methods	5	
SSI 3303	Ethical Issues in Social Science Research	5	
AREA COURSES: either Anthropology or Sociology			**25**
Electives: with the approval of the faculty advisor			**45**
			90

NOTE: A student with special interests may consult faculty advisors to plan an individualized program of study.

A grade of C or better in all courses required for the major is necessary for graduation.

Field Work Experience—A meaningful understanding of anthropology and sociology can best be developed through the interplay of theory and research. Each student will be encouraged to work outside of the formal classroom under faculty supervision.

Minor in Sociology/Anthropology

PRESCRIBED COURSES: 25 credits in the Department of Sociology/Anthropology including the following:

- 2 courses chosen from among the four core courses required of departmental majors: ANT 3086 Anthropological Theories; SOC 3610 Sociological Theories; SOC 3500 Research Methods; SSI 3303 Ethical Issues in Social Science Research.

Course Descriptions

Definition of Prefixes
ANT—Anthropology; SOC—Sociology; SSI—Social Sciences-Interdisciplinary.

ANT 3000 The Scope of Anthropology (5)
An introductory survey of the major areas of anthropological inquiry, including social, cultural, physical and applied anthropology, as well as archaeology and linguistics. An examination of the anthropological perspective.

ANT 3004 Makers of Modern Anthropology (5)
The craft of anthropology is explored through the work and writings of such well-known anthropologists as Ruth Benedict, L. S. B. Leakey, Claude Levi-Strauss, Oscar Lewis, Margaret Mead and Robert Redfield. Designed for nonmajors; majors may enroll for elective credit only.

ANT 3086 Anthropological Theories (5)
This course examines the process of theory building and explanation in the social sciences, and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include Darwin and evolution; Boas and historical particularism; Freud and culture and personality, and Malinowski and functionalism.

(Continued)

Anthropology

ANT 3144 Prehistory of the Americas (5)
Early man in the Americas is examined through archaeological records.

ANT 3241 Myth, Ritual and Mysticism (5)
A survey of anthropological approaches to the study of myth, ritual, and mysticism, as religious and symbolic systems. The social and psychological functions of myth and ritual in primitive and complex societies will be compared.

ANT 3251 Peasant Society (5)
Comparative study of peasant societies with emphasis on the concepts of folk community, traditional culture, and modernization. Data on peasantry in Latin America and other culture areas will be reviewed.

ANT 3262 Agriculture and Society (5)
An introduction to the role of agriculture in the development of civilization; comparative agricultural production systems; problems and prospects of agricultural development.

ANT 3263 World Food Supply (5)
An examination of world food supply, including distribution patterns and problems. Comparisons between nutritional standards and human and economic development programs among industrialized and Third World nations are made.

ANT 3302 Male and Female: Sex Roles and Sexuality (5)
Cross-cultural ethnographic data will be utilized to examine the enculturation of sex roles, attitudes and behavior; cultural definitions of maleness and femaleness; and varieties of human sexual awareness and response.

ANT 3402 Anthropology of Contemporary Society (5)
The application of classical anthropological methods and concepts to the analysis of contemporary American culture. Investigation of a unique cultural scene will involve the student in field work and the preparation of an ethnographic report.

ANT 3403 Cultural Ecology (5)
Systems of interaction between man and his environment; the role of social, cultural and psychological factors in the maintenance and disruption of ecosystems; interrelations of technological and environmental changes.

ANT 3422 Kinship and Social Organization (5)
Topics will include the comparative study of systems of kinship, social organization and politics in preliterate societies. Age and sex differences, division of labor, class, caste, slavery and serfdom will also be explored.

ANT 3425 Utopias and Intentional Communities (5)
A case study examination of historical and contemporary attempts to develop the "ideal" social setting for human interaction. The community study approach in anthropology will serve as the theoretical basis for this course.

ANT 3432 Culture and Personality (5)
The relationship between culture and personality; problems of individual adjustment to cultural norms; and current issues in psychological anthropology.

ANT 3435 The Individual in Anthropology (5)
Study of the individual in his socio-cultural context; the place of the individual in anthropological theory; and the influence of culture on the individual through the use of biography, autobiography, journals, diaries, novels, and narratives.

ANT 3442 Urban Anthropology (5)
Anthropological study of urbanization and urban life styles, with particular emphasis on rural-urban migration and its impact on kinship groups, voluntary associations, and cultural values.

ANT 3462 Medical Anthropology (5)
A survey of basic concepts; examination of preliterate and non-western conceptions of physical and mental health and illness; emphasis on cultural systems approach to the study of illness and health care. Background in biology, medicine, or nursing helpful; instructor's permission required.

ANT 3476 Movements of Rebellion and Revitalization (5)
Crosscultural study of revolutionary, messianistic, and revitalization movements in tribal and peasant societies. Case materials include Negro slave revolts, cargo cults, and peasant wars of the twentieth century (Mexico, China, Vietnam).

ANT 3500 Origin and Dispersion of Man and Woman (5)
A study of the biological history of man as interpreted through the theory of evolution, anatomy and the fossil record, contemporary population genetics, and the concept of race.

ANT 3512 Social Biology (5)
An examination of the biological bases for human adaption and sociocultural interaction.

ANT 3542 Human Biology and Cultural Behavior (5)
Studies of animal social behavior and the relevance of these ethnological studies for the analysis of human development and socio-cultural behavior.

ANT 3733 Therapeutic Communities (5)
Cross-cultural and inter-ethnic analysis of mental health and illness. Analysis of formal and informal community mental health delivery systems, with emphasis on clinical, humanistic, and therapeutic modalities.

ANT 4007 The Organizer (5)
A study of men who have inspired mass organizations and brought about major social and cultural transformations. The organizing styles of Christ, Gandhi, Hitler, Mao Tse-tung, and Martin Luther King will be examined. The relationship between culture content and organizational symbols will be analyzed.

ANT 4224 Tribal Art and Aesthetics (5)
This course deals with the social and cultural context and functions of art in preliterate societies as in sub-Saharan Africa, New Guinea, and North America. Topics include wood carving, bronze casting, singing, dancing, drumming, masquerading, theatrical performance, and all forms of oral literature.

ANT 4261 Environmental Revitalization (5)
The course will present a cultural ecological framework for the analysis of the relationship between dietary habits, energy consumption, and land resource use; the growth of agribusiness; demise of rural society; and world food consumption patterns.

ANT 4211–4360–4361–4328 Area Studies (5)
Ethnological survey of selected indigenous cultures. Areas to be studied include: (1) North America; (2) Africa; (3) Asia or Southeastern Asia; (4) China. Topics will be announced and will vary depending on current staff.

ANT 4242 Studies in Transpersonal Phenomena (5)
The data on transpersonal phenomena (such as psychic healing, trance induction, ESP, and expanded consciousness) will be reviewed and related to the cultural settings in which they were collected.

ANT 4243 Witchcraft (5)
Study of the theories, facts, and fantasies concerning witchcraft in western and non-western society, from socio-cultural, socio-historical and socio-psychological perspectives.

ANT 4273 Law and Culture (5)
A cross-cultural examination of the practical and theoretical relationships between the legal system and other aspects of culture and society.

(Continued)

Anthropology

ANT 4305 Explorations in Visual Anthropology (5)
An examination of the use of film in anthropology, both as a method of ethnographic documentation and as a research technique for analyzing non-verbal modes of communication. Documentary films and cross-cultural data on paralanguage, kinesics, proxemics, and choreometrics will be reviewed and discussed.

ANT 4306 The Third World (5)
An interdisciplinary, cross-cultural survey of the factors contributing to the emergence of the Third World. Significant political, economic, pan-national and pan-ethnic coalitions are analyzed.

ANT 4312 American Indian Ethnology (5)
An examination of the sociocultural patterns of selected American Indian groups as they existed in the indigenous state, prior to European contact.

ANT 4314 The American South: A Regional Subculture (5)
A course designed to provide an understanding of the Southern regional subculture. Discussion topics will include an analysis of the sociocultural characteristics attributed to this region.

ANT 4315 Afro-American Anthropology (5)
Interdisciplinary study of Afo-American cultures of the New World. Topics include cultural patterning, Black English, ethnomusicology, socio-economic adaptations, black culture and ghetto ethnography.

ANT 4324 Many Mexicos (5)
An interdisciplinary examination of the major social, cultural, economic and political factors contributing to the transformation from the Aztec empire to colonial society to modern Mexico.

ANT 4328 Maya Civilization (5)
A survey of the culture and intellectual achievements of the ancient Maya civilization of Mesoamerica. Course includes: history and social-political structure, archeology, agriculture and city planning, mathematics, hieroglyphics, astronomy, and calendars. No prerequisites.

ANT 4329 Research in Maya Civilization (5)
Concentration is on hieroglyphic research with the inscriptions and Maya codices (Dresden, Madrid and Paris) as resource material. Students will be instructed in research techniques, including calendric counting procedures, correction of scribal errors, reconstruction of almanacs and methodology of decipherment. Supervised group projects will apply techniques to original research and reporting of conclusions. Prerequisite: ANT 4328.

ANT 4332 Latin America (5)
Native cultures of Mexico, Central and South America; the lowland hunters and gatherers and the pre-Columbian Inca and Aztec Empires; the impact of the Spanish conquest.

ANT 4340 Cultures of the Caribbean (5)
An ethnological survey of native cultures and of the processes of culture contact and conflict in the Caribbean and Circum-Caribbean region.

ANT 4343 Cuban Culture and the Revolution (5)
Cultural history of Indian, African and Spanish populations; the Revolution and traditional Cuban society; the problems and prospects of the Cuban community in the United States.

ANT 4352 African Peoples and Cultures (5)
This course includes a survey of the cultures and civilizations of sub-Saharan Africa. It includes discussions of history, geography, sociopolitical structures, religion, art, music, and oral literature. No prerequisite.

ANT 4405 Culture and Consciousness (5)
This course provides an introduction to the anthropological study of certain phenomena of consciousness. There are deep roots for the study of altered and/or higher states of consciousness in anthropology. Topics to be explored will include: vision questing, possession phenomena, trance dancing, glossalalia, curing, shamanism, and meditation.

ANT 4406 Anthropology of War and Violence (5)

ANT 4433 Psychological Anthropology (5)
Cross-cultural studies in cognition, possession states, myth making and world view are examined. The interface of anthropology, psychology and psychiatry is reviewed.

ANT 4451 Racial and Cultural Minorities (5)
The study of selected ethnic and cultural groups, with particular emphasis on patterns of interethnic and intercultural relationships. Minority groups studied may include Afro-Americans, American Indians, Chicanos, Cubans, women, senior citizens or prisoners.

ANT 4452 The Rural Poor: Migrants, Sharecroppers and Tenant Farmers (5)
The decline of the family farm and the rise of corporate agribusiness; the life styles of migrants, sharecroppers and tenant farmers; the farm labor movement and farmer cooperatives; government policy and the rural poor.

ANT 4453 Culture and Poverty (5)
Cultural patterns among the poor; current cultural models utilized in the study of poverty; the impact of cultural models on anti-poverty programs and public policy.

ANT 4454 American Indians Today (5)
An examination of the history of the American Indians since European contact, and their socio-cultural patterns as a contemporary American minority group.

ANT 4460 Hallucinogens and Culture (5)
Cross-cultural examination of the political, religious, and socio-cultural factors related to the use of hallucinogens. Case materials from tribal and contemporary societies will be analyzed, including the study of soma, the divine mushroom of immortality of the Hindu Rig-Veda; the native American Indian peyote cult; shamanism and healing in Latin America; the teachings of Don Juan, a Yaqui sorcerer, and the therapeutic uses of LSD. This course does not focus primarily on drug abuse and rehabilitation, although these topics are mentioned within the comparative context of the ethnographic data.

ANT 4469 Special Topics in Medical Anthropology (5)
Special courses dealing with advanced topics including: (1) folk medicine and ethnoscience; (2) nutritional anthropology; (3) anthropology and nursing; (4) medical anthropology and the elderly.

ANT 4474 Culture Shock: The Year 2000 (5)
An investigation of future patterns of culture; an analysis of the concepts of culture lag, culture change, culture shock and future shock; a review of conceptual models for projecting the shape of past-industrial society to predict the relationship of man to his environment in the year 2000.

ANT 4705 Applied Anthropology (5)
The theory and practice of applied anthropology; cultural factors and planned community change; implications of case data for public policy. Emphasis will be placed on the processes of economic development and culture change in developing nations.

ANT 4723 Education and Socialization (5)
A crosscultural examination of educational and socialization processes, their functions in the larger society, and the value systems they transmit.

ANT 4907 Directed Individual Study (VAR)
Supervised readings and/or field research and training. May be repeated.

ANT 4908 Directed Field Research (VAR)
Permission of instructor required.

ANT 4930 Topics in Anthropology (5)
Special courses dealing with advanced topics in the major anthropological subdisciplines: (1) social and cultural anthropology, (2) applied

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Biological Sciences

anthropology, (3) physical anthropology, (4) linguistics, and (5) archaeology. Instruction by staff or visiting specialists. Topics to be announced. Instructor's permission required. May be repeated.

ANT 4944 Practicum (5)
Permission of the instructor required.

ANT 5466 Cultural Factors in Health Care Delivery (5)
Topics studied include the varieties of subcultural perceptions of and responses to illness; formal and informal healing systems; the indigent patient; and the design of health care delivery services in a multicultural area. Prerequisite: medical anthropology course or permission of the instructor.

ANT 5468 Addicts and Addictions (5)
A cross-cultural examination of the historical, sociocultural, and pharmacological factors involved in drug abuse and addiction. Various treatment programs are compared and evaluated.

ANT 5726 Anthropology for Educators (5)
A course designed to provide educators, particularly at the secondary level, with an overview of anthropology as a discipline; its role in a social science curriculum; methods for designing and teaching anthropology courses; and sources of bibliographic and audio-visual aids.

ANT 5908 Directed Individual Study (VAR)
Supervised readings and/or field research and training. May be repeated.

ANT 5915 Directed Field Research (Variable)
Permission of instructor required.

ANT 5937 Community Action Research Seminar (5)
Seminar will focus on the application of social science data gathering techniques to the analysis and resolution of community issues, such as urban planning, environmental quality, and corporate consumer accountability. Open to majors only. Prerequisite: SOC 3500, or permission of the instructor.

SOC 3500 Research Methods (5)
An introduction to the scientific method and its application to anthropological and sociological research. Topics include formulation of research problems, research design, field methods and collection of data, hypothesis testing, and interpretation of results.

SOC 3610 Sociological Theories (5)
Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists with respect to their methodologies. Treats the emergence and consequences of modern society, political sociology, conception of social class, and analysis of the role of religion in society. The student is expected to gain in-depth knowledge of opposing theories, as well as an appreciation of the contingent nature of sociological theories.

SSI 3010 Introduction to Social Science (5)
An introduction to anthropology, psychology, and sociology; a survey of the similarities and differences in history and philosophy and goals and techniques of research in these disciplines; a review of modern interdisciplinary efforts.

SSI 3303 Ethical Issues in Social Science Research (5)
An introduction to the problems and possibilities of ethical premises in the perspectives and work of social scientists. Examination of historical interrelationships between moral philosophies and developing scientific methodologies. Analyses of contemporary social ethicists attempts to assume moral postures while examining social relations. Case studies involving issues such as nation building in areas of accelerated change, including Africa and Asia.

Biological Sciences Major

Leon A. Cuervo, *Associate Professor and Chairperson*
Abraham M. Stein, *Professor*
Chun-fan Chen, *Associate Professor*
Walter M. Goldberg, *Associate Professor*
Gerald L. Murison, *Associate Professor*
Martin L. Tracey, *Associate Professor*
John C. Makemson, *Assistant Professor*
James A. McArthur, *Assistant Professor*
Case K. Okubo, *Assistant Professor*
George Taylor, *Assistant Professor*
Carlo Ambrosino, *Courtesy Professor*
Patsy A. McLaughlin, *Courtesy Professor*
Josel Szepsenwol, *Courtesy Professor*
Anitra Thorhaug, *Courtesy Professor*

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science*

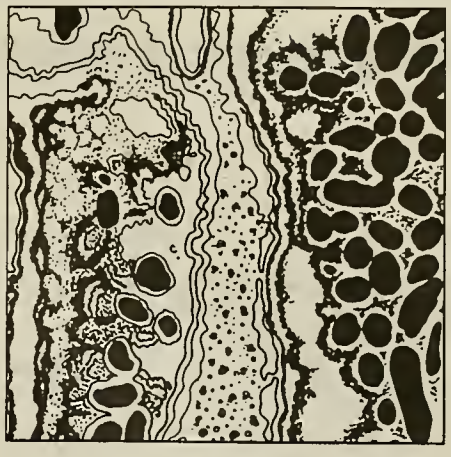
*Students interested in teacher certification refer to the School of Education, page 2.

LOWER DIVISION PREPARATION:

Required Courses: 8 semester hours in each of the following areas: general biology, general chemistry, and general physics; 9 semester hours in college algebra, trigonometry, and analytical geometry.

Recommended Courses: foreign language, calculus, organic chemistry.

Remark: 6 semester hours above the introductory level in biology may be counted toward the upper division major.



LOWER OR UPPER DIVISION PREPARATION:
Two semesters or quarters of organic chemistry with laboratory.

UPPER DIVISION PROGRAM:

		Quarter Hours	
Required Courses			
PCB 3043	Fundamentals of Ecology	5	
PCB 3513+L	Genetics	7	
PCB 3203+L	Cell Physiology	7	
PCB 4723+L	Animal Physiology	7	
	OR		
BOT 4504+L	Plant Physiology	7	
ZOO 3603+L	Embryology	7	
	OR		
PCB 4254	Developmental Biology	5	
BSC 4931	Senior Seminar	2	
			33–35
	Biological Sciences Electives [1,2,3]		17
Mathematics	Courses chosen from: MAC 3411, MAC 3412, STA 3122, STA 3123, STA 3161		8–10
Electives			28–32
			90

[1] APB 3253, BOT 3823, BOT 3800, BSC 3023, BSC 3033, BSC 3913, BSC 3949, BSC 4914, BSC 4949, BSC 6916, MCB 3000 and PCB 3700 are not applicable to this requirement.
[2] Electives will be chosen in consultation with faculty advisor.
[3] One upper division course in botany from an approved list, and at least two courses at the 4000 or 5000 level are required for graduation. A grade of C or better in all courses required for the major is necessary for graduation.

SPECIAL PROGRAMS
Bachelor of Science (with Honors)

Requirements:
Admission to the Honors Program:
a. Permission of the Department. Application should be made after the third quarter at FIU and three quarters before graduation.
b. A minimal grade point average of 3.6

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Biological Sciences

based upon total college records or FIU records alone, whichever is higher.

Graduation with Honors:

a. A minimal grade point average of 3.7 based upon FIU records.
b. Completion of Honors Curriculum.
   1. General requirements for the Bachelor of Science degree in Biology must be met.
   2. The final year of the study program and the title and description of the thesis must be recommended by the student's sponsor (advisor) and approved by the Curriculum Committee.
   3. The Undergraduate Honors Thesis must be approved by the student's sponsor and presented in a seminar.

Pre-Professional Curricula

Programs of study satisfying requirements for admission to colleges of medicine, dentistry and veterinary medicine arranged in consultation with faculty advisor. MAC 3411, CHM 3400, and ZOO 3603 are recommended as fulfilling requirements of many professional schools.

Certificate Program in Marine Sciences:

See section on certificate programs under College of Arts and Sciences.

Minor in Human Biology

Students may elect a minor in Human Biology by selecting four courses from the following list:

BSC 3023	Human Biology
APB 3253	Biological Basis of Human Sexuality
MCB 3013	General Microbiology
PCB 3513	Genetics
PCB 3873	Biological Foundations of Behavior
ZOO 3731	Human Anatomy
ZOO 3743	Neuroscience
PCB 3700	Foundations of Human Physiology (PCB 3702, PCB 3703, PCB 3704, and PCB 4701 are options for students who desire a more sophisticated course in Human Physiology). There are no prerequisites for BSC 3023, APB 3253, PCB 3701, ZOO 3731 and MCB 3000

Master of Science in Biological Sciences

Cooperative program pending approval

Course Descriptions

Definition of Prefixes

APB-Applied Biology; BCH-Biochemistry; BOT-Botany; BSC-Introductory Biology; ENY-Entomology; MCB-Microbiology; OCB-Oceanography (Biological); PCB-Process Cell Biology; ZOO-Zoology.

APB 3253 Biological Basis of Human Sexuality (5)
The physiological development of the human organism as a sexual being will be treated, with a review of the psycho-social and psycho-sexual bases of human personality. Patterns of adult sexual behavior will be explored, with emphasis on achieving healthy human sexual attitudes.

BCH 3033 Biochemistry (5)
Introduction to the chemistry of proteins, carbohydrates, lipids and their constituents. Principles of enzymology and metabolism. Prerequisites: Organic Chemistry I and II or permission of instructor.

BCH 3033L Biochemistry Laboratory (2)
Laboratory to accompany BCH 3033. Prerequisites: BCH 3033 or concurrent registration in BCH 3033.

BCH 5315 Biochemistry I (6)
Chemical reactions and macromolecular properties of proteins, nucleic acids and polysaccharides. Genetic and evolutionary aspects of protein structure. Permission of instructor.

BCH 5316 Biochemistry II (6)
Comparative biochemistry; metabolism and regulation of metabolism in microorganisms, plants and animals; mechanisms of enzyme reactions. Prerequisites: BCH 3033 or equivalent or permission of instructor.

BCH 6505 Enzyme Chemistry (5)
Physical and chemical properties of enzymes. Review of modern analytical technique in measurement of enzymatic reactions. Discussion of selected enzyme systems. Permission of instructor.

BOT 3353 Morphology of Vascular Plants (5)
A survey of groups of vascular plants emphasizing comparative life histories, vegetative and productive structures, and evolutionary relationships. Prerequisites: I botany course or permission of instructor.

BOT 3353L Plant Morphology Laboratory (2)
Laboratory to accompany BOT 3353.

BOT 3663 Topics in Tropical Botany (5)
Survey of representatives of major plant families of the tropics. Examination of selected adaptive characteristics of plants in the tropical ecosystems. Introduction to spices and economically significant tropical plants. Prerequisites: General Chemistry or permission of instructor.

BOT 3663L Tropical Botany Laboratory (2)
Laboratory to accompany BOT 3663

BOT 3800 Plants and People (5)
Survey of the uses of plant materials and of the botany of plant groups of human importance.

BOT 3823 Horticulture (5)
Examination of theoretical and practical problems of plant growth and production. Prerequisite: A course in plant sciences or advanced biology or permission of instructor.

BOT 4504 Plant Physiology (5)
Survey of plant growth and metabolism emphasizing studies of responses to environmental stimuli. Prerequisite: I semester of Organic Chemistry.

BOT 4504L Plant Physiology Laboratory (2)
Laboratory to be preceded by or taken concurrently with BOT 4504.

BOT 5665 Topics in Tropical Plant Science (5)
Survey of living materials of at least 50 major tropical plant families. Developmental studies using tropical plant materials are reviewed from both physiological and morphological viewpoints in addition to lectures in economic botany, field studies of tropical fruit and spice trees are carried out. At least four major tropical ecosystems are analyzed and examined in the field. Permission of instructor.

BOT 5665L Topics in Tropical Plant Science Laboratory (2)
Laboratory to accompany BOT 5665. Permission of instructor.

BOT 6536 Plant Physiology and Biochemistry (5)
Advanced topics emphasizing transport, plant hormones, tropisms and photosynthesis. Lecture, conference and laboratory. Prerequisites: Organic Chemistry or permission of instructor.

BOT 6536L Plant Physiology and Biochemistry Laboratory (2)
Laboratory to accompany BOT 6536. Permission of instructor.

BSC 3023 Human Biology (5)
Human structure and function with emphasis on aspects that relate to human development, genetics and neurobiology. The relationship of these aspects to handicapping conditions with respect to mental retardation and behavioral disorders will be discussed. Primarily for non-science majors.

BSC 3033 Issues in Biology (5)
Impact on society of recent developments in biological research. The course provides a general background for the intelligent discussion of problems related to states of disease, senescence and death, control of the growth of the population, genetic engineering and control of behavior.

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Biological Sciences

BSC 3913 Research Laboratory (3–8)
Independent laboratory study in a project or projects of the student's choice. Registration by consultation with instructor. May be repeated for additional credit.

BSC 3933 Topics in Biology (2–5)
An intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum.

BSC 3934 Topics in Biology (2–5)
An intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum.

BSC 3949 Cooperative Education in Biology (5)
A student majoring in biological sciences may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.

BSC 4931 Senior Seminar (2)
An exploration of various research works in biological sciences.

BSC 4949 Cooperative Education in Biology (5)
A student majoring in biological sciences may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisites: Permission of Co-op Education and major department.

BSC 5931 Graduate Seminar (5)
Oral presentation of an assigned literature survey by senior and graduate students. Required of candidates in the Honors Program. Students may register for letter grade by oral presentation; or credit/no credit option by participation and submission of written report.

MCB 3000 Introductory Microbiology (5)
Basic concepts of microbes as pathogens, food spoilage and fermentative organisms. Microbial relationships to immunology, sanitation, pollution and geochemical cycling. Not applicable for majors in Biological Sciences or Medical Technology.

MCB 3000L Introductory Microbial Laboratory (2)
Basic Techniques of microscopy, cultivation and study of microorganisms. Cannot be used in place of MCB 3023L.

MCB 3023 General Microbiology (5)
Introduction to the principles and techniques of microbiology, genetics, taxonomy, biochemistry and ecology of microorganisms. Prerequisites: 1 semester of Organic Chemistry; 2 courses in Biology.

MCB 3023L General Microbiology Laboratory (2)
Laboratory to accompany MCB 3023. Prerequisites: 1 semester of Organic Chemistry; 2 courses in Biology.

MCB 4733 Marine Microbiology (5)
Physiological-ecological study of the distribution *in situ* activity and biology of marine bacteria; public health significance of pathogens and microbial toxins conveyed to man; diseases of marine animals. Prerequisites: General Microbiology.

MCB 4733L Marine Microbiology Laboratory (2)
Laboratory and field investigations of marine bacteria. To accompany MCB 4733.

MCB 5505 Advanced Virology (5)
Principles and methods of study of bacterial, plant, and animal viruses. Molecular aspects of viral development virus pathogens and carcinogens. Prerequisites: Biochemistry, Genetics, and Organic Chemistry.

MCB 5505L Advanced Virology Laboratory (2)
Laboratory to accompany MCB 5505.

MCB 5735 Marine Microbiology (5)
As MCB 4733. Additional requirements for all graduate students. Prerequisites: General Microbiology.

MCB 5735L Marine Microbiology Laboratory (2)
Lab to accompany MCB 5735.

OCB 3010 Biological Oceanography (5)
The basic aspects of biological, geological, chemical and physical oceanographic processes as they relate to marine organisms. Lecture and demonstrations. Prerequisites: 8 semester hours of Biology.

OCB 3010L Biological Oceanography Laboratory (5)
Lab to accompany OCB 3010.

OCB 4674L Techniques in Biological Oceanography (2)
A laboratory oriented course designed to acquaint the student with physical, chemical and biological techniques at sea. Shipboard experience will be a required part of the course. Prerequisites: Concurrent registration in OCB 3010; ZOO 3253, ZOO 3253L; 1 quarter of Organic Chemistry or permission of instructor.

OCB 5635 Coral Reef Ecology (5)
Zoogeography, ecology and zonation, morphology, and paleontology of coral reefs around the world with emphasis on Caribbean forms. Growth, physiology, productivity as well as effects of predation, competition and pollution on coral reefs are also discussed.

OCB 5635L Coral Reef Ecology Laboratory (2)
Laboratory to accompany OCB 5635.

PCB 3043 Fundamentals of Ecology (5)
The basic principles governing the interaction of organism and environment. Trophic structure and energetics of ecosystems; biogeochemical cycles; limits and controlling factors in organismic distribution and abundance; biological interactions; species diversity; evolution of populations and communities; the impact of man. Lecture and field trips. Prerequisites: One year of biology, basic chemistry.

PCB 3043L Fundamentals of Ecology Laboratory (2)
Laboratory to accompany PCB 3043.

PCB 3203 Cell Physiology (5)
A discussion of the physiology of cells from the biochemical and biophysical points of view. Enzyme structure and function, cellular metabolism and its regulation. Energy transductions and conservation, transfer of information: electrical and chemical signals. Cell cycle and cell division. Prerequisites: 8 semester hours of General Biology, General Physics, and Organic Chemistry.

PCB 3203L Cell Physiology Laboratory (2)
Laboratory to accompany PCB 3203.

PCB 3233 Immunology (5)
Fundamentals of immunology including antibody structure, immunopathology, molecular recognition at cell surfaces, immunological aspects of cancer biology. A previous course in microbiology is suggested but not required.

PCB 3233L Immunology Laboratory (2)
Laboratory to accompany PCB 3233.

PCB 3510 Issues in Genetics-recDNA and IQ (5)
Examination of the principles of Mendelian and molecular genetics. These basic principles will then be employed in interpreting for discussion recent developments in recDNA engineering. Examination of the inheritance of quantitatively varying traits and discussion of IQ inheritance. Suitable for non-science majors.

PCB 3513 Genetics (5)
Mendelian inheritance and introduction to molecular genetics.

PCB 3513L Genetics Laboratory (2)
Laboratory to accompany PCB 3513.

PCB 3612 Sociobiology (5)
A study of the population genetics-ethology based explanations of the social behavior in animals.

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Biological Sciences

PCB 3700 Foundations of Human Physiology (5)
Functional survey of the organ systems of the human body. Intended primarily for non-science majors.

PCB 3702 Intermediate Human Physiology (5)
Functions of the human body and the physicochemical mechanisms responsible for each organ's function. Prerequisite: General Biology.

PCB 3702L Intermediate Human Physiology Laboratory (2)
Laboratory course demonstrating principles in PCB 3702.

PCB 3703 Human Physiology I (4–5)
Basic facts and concepts relating to the physiology of cells and nervous, muscular, and cardiovascular systems, with emphasis on regulatory mechanisms and abnormal physiology. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics.

PCB 3703L Human Physiology I Laboratory (1)
Laboratory to accompany PCB 3703.

PCB 3704 Human Physiology II (4–5)
Physiology of respiratory, gastrointestinal, excretory, endocrine and reproductive systems. Continuation of PCB 3703. Prerequisites: One year of Biology or Zoology; Chemistry, and Physics.

PCB 3704L Human Physiology II Laboratory (1)
Laboratory to accompany PCB 3704.

PCB 3873C Biological Foundations of Behavior (5)
Biological bases of behavior emphasizing neural and hormonal mechanisms of integrated behavior. Lecture, conference, library or laboratory projects.

PCB 4024 Cell Biology (5)
Structure and function of cellular organelles. Prerequisites: Genetics or Cell Physiology, and Organic Chemistry.

PCB 4254 Developmental Biology (5)
Comprehensive survey of principles of development and critical analysis of methods used to study these problems. Prerequisite: Molecular Biology.

PCB 4254L Experimental Biology (2)
Laboratory techniques used in biological research. The specific techniques covered will depend on the field of work of the instructor responsible for the course during a given quarter. May be repeated for credit under different instructors. Permission of the instructor.

PCB 4324 Terrestrial Ecology (5)
A comprehensive survey of the planet's major terrestrial ecosystems and their characteristics. Emphasis on human impact and management of terrestrial biological resources. Specific treatment of zoogeography, pest control, agricultural ecology and management of wild areas. Prerequisites: One year of Biological Science and Ecology or permission of instructor.

PCB 4324L Terrestrial Ecology Laboratory (2)
Quantitative laboratory to accompany PCB 4324. Field exercises in vegetation analysis, community description, animal population dispersion, size estimations. Prerequisites: One year of Biology, Algebra, concurrent registration in PCB 4324.

PCB 4524 Molecular Biology (5)
An advanced treatment of nucleic acid and protein biochemistry. Emphasis will be placed on synthesis of macromolecules with topics to cover materials of recent interest in molecular genetics, such as genetic engineering, gene splicing and restriction enzymes. Prerequisites: Biochemistry or Genetics.

PCB 4524L Molecular Biology Laboratory (2)
Laboratory to accompany PCB 4524.

PCB 4673 Evolution (5)
A study of the synthetic theory of evolution, its historic and experimental justification and the mechanisms of natural selection. Prerequisites: Genetics, Ecology or permission of instructor.

PCB 4673L Evolution Laboratory (2)
Laboratory to accompany PCB 4673.

PCB 4701 Human Systemic Physiology (5)
Selected topics in mammalian and human physiology with emphasis on topics of clinical significance. Prerequisites: Introductory human physiology or a college level course in biology or chemistry.

PCB 4723 Animal Physiology (5)
Advanced study of physiological mechanisms employed by animals to maintain function of the organ systems and to interact with the environment. Prerequisites: Organic Chemistry and Cell Physiology.

PCB 4723L Animal Physiology Laboratory (2)
Laboratory to accompany PCB 4723.

PCB 5195 Microscopy/Microtechnique (5)
Laboratory techniques of preparation and microscopic examination of cells, tissues and organs. Prerequisites: Histology and Histology Lab.

PCB 5205 Cell Physiology and Biophysics (5)
Fundamental biophysical properties of membranes, transport of water and solutes across biological membranes, passive and active electrical phenomena in membrane systems. Biochemistry and biophysics of contractile mechanisms. Transfer of information from cell to cell. Bioluminescence. Effects of radiation on macromolecules. Prerequisites: Calculus and Physical Chemistry or permission of instructor.

PCB 5259 Topics in Developmental Biology (5)
Molecular and cellular mechanisms in the development of plants and animals. Prerequisites: Senior status or permission of instructor.

PCB 5615 Molecular and Organismal Evolution (5)
The evolutionary relationships among nucleotides and proteins as well as the processes which yield these relationships are examined. The possible molecular events leading to speciation will then be considered. Prerequisites: Genetics and Biochemistry.

PCB 5835 Neurophysiology (5)
Comparative neurophysiology; physico-chemical mechanisms of resting and action potentials; synaptic transmission; neural coding and integration; sensory-motor function and neurophysiological basis of behavior. Prerequisites: Biochemistry, Cell Physiology, Calculus.

PCB 5835L Neurophysiology Laboratory (2)
Laboratory to accompany PCB 5835.

ZOO 3253 Marine Invertebrate Zoology (5)
Taxonomy, anatomy, development, physiology and ecology of major invertebrate phyla, excluding insects. Emphasis on marine invertebrates. Prerequisites: One year of biology or permission of instructor.

ZOO 3253L Marine Invertebrate Zoology Laboratory (2)
Laboratory to accompany ZOO 3253.

ZOO 3513 Ethology (5)
The course is designed to introduce the student to the biological basis of behavior and to the ecological and evolutionary consequences of various behaviors. Prerequisites: One semester of zoology or two semesters of general biology.

ZOO 3603 Embryology (5)
Animal morphogenesis. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.

ZOO 3603L Embryology Laboratory (2)
Laboratory to accompany ZOO 3603. Prerequisite: Concurrent enrollment in ZOO 3603.

ZOO 3731 Human Anatomy (4–5)
Survey of organ systems of the human body. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.

(Continued)

Economics

ZOO 3731L Human Anatomy Demonstration (1)
Demonstrations of the prosected human cadaver. Prerequisite: Concurrent enrollment in ZOO 3731.

ZOO 3733 Human Gross Anatomy I (4–5)
Structure and function of various tissues, organs and organ systems of the human body. Prerequisites: One year of general biology with laboratory or general zoology and general botany with laboratory.

ZOO 3733L Human Gross Anatomy I Laboratory (2)
Dissection of human cadaver material to reveal the relationships of the various organ systems of the body. Prerequisite: Concurrent enrollment in ZOO 3733.

ZOO 3734 Human Gross Anatomy II (4–5)
Continuation of ZOO 3733. Prerequisite: One course in physiology; one course in anatomy.

ZOO 3734L Human Gross Anatomy II Laboratory (2)
Continuation of ZOO 3733L. Prerequisites: ZOO 3733 and 3733L.

ZOO 3743 Neuroscience (4–6)
Structure and function of the human nervous system. Prerequisites: One course in physiology plus Human Gross Anatomy I and II.

ZOO 3743L Neuroscience Laboratory (2)
Dissection and demonstration of the various parts of the human brain. Laboratory to accompany ZOO 3743.

ZOO 3753 Histology (5)
Microscopic anatomy of cells, tissues and organs. Prerequisite: General Introductory College Biology.

ZOO 3753L Histology Laboratory (2)
Laboratory to accompany ZOO 3753. Prerequisite: General Introductory College Biology.

ZOO 5265 Biology of Crustaceans (5)
Morphology, physiology, systematics and evolution of crustaceans.

ZOO 5265L Biology of Crustaceans Laboratory (3)
Comprehensive laboratory study of the comparative and functional morphology of crustaceans.

ZOO 5335 Systematic Zoology (5)
A practical and theoretical approach to evolutionary zoology. Prerequisites: 8 semester hours of biology or zoology.

Economics Major

Mira Wilkins, *Professor and Acting Chairperson*
Raul Moncarz, *Associate Professor*
D. Babatunde Thomas, *Associate Professor*
Leonard P. Lardaro, *Assistant Professor*
Peter J. Montiel, *Assistant Professor*
Gezahegne Bekele, *Assistant Professor*
Gordon V. Karels, *Assistant Professor*

The major in economics provides the student with an understanding of economic problems and institutions, and the analytical tools to apply this knowledge to contemporary problems. The program is designed for the student desiring a career in industry, government, international agencies or teaching; and for those planning professional or graduate study in economics, business, law, public administration, urban studies, or international relations.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses: six semester hours in principles of economics; three semester hours in social science; six to nine semester hours in humanities; six semester hours in English composition; six semester hours in college algebra and trigonometry; three semester hours in statistics.

Remarks: The entering student who has not taken principles of economics must enroll in ECO 3003 during his or her *first* quarter at the University. Students who expect to go beyond the B.A. level in economics are advised to begin calculus at the lower division level.

UPPER DIVISION PROGRAM:

		Quarter Hours
Major Required Courses:		50
ECO 3101	Theory of Price	5
ECO 3203	Aggregate Economic Analysis	5
ECO 3271	Topics in Theory	5
ECO 4417	Measurement and Analysis of Economic Activity	5
Additional Economics Courses*		30
*ECO 3003, ECO 3043 and ECO 3432 cannot be included in this grouping		
Electives		40
		90

Remarks: A grade of C or better in all courses required for the major is necessary for graduation. A student may choose a program in general economics or concentrate in one of the following areas: urban and environmental economics, labor and manpower studies, international economics and development, monetary and fiscal policy. The student should select courses in consultation with an advisor.

Minor in Economics

		Quarter Hours
Minor Required Courses:		20
ECO 3101 or ECO 3203	Theory of Price or Aggregate Economic Analysis	5
Additional Economics Courses*		15
*ECO 3003, ECO 3043, and ECO 3432 cannot be included in this grouping		20

Remark: Introductory courses in calculus and statistics are strongly recommended for the student minoring in economics.

Course Descriptions

Definition of Prefixes
ECO–Economics; ECP–Economic Problems & Policy; ECS–Economic Systems & Development;

ECO 3003 Economics, Man and Society (5) (F,W,S,SS)
Relationship of economics to individual and group action. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory.

ECO 3043 Consumer Economics (5)
Consumer behavior; advertising and other influences affecting demand. Patterns of consumer expenditure; effects of public policy on family incomes and consumption patterns. The consumer protection movement.

ECO 3101 Theory of Price (5) (W,SS)
Operation of individual markets; market structure; theory of the firm; theory of production; demand theory; general equilibrium and welfare economics. Recommended preparation: ECO 3003.

ECO 3203 Aggregate Economic Analysis (5) (F,S)
Analysis of the measurement, determination, and control of aggregate economic activity; the monetary system in relation to income and employment; short-term income fluctuations; long-term growth. Recommended preparation: ECO 3003.

(Continued)

Economics

ECO 3223 Money and Banking (5)
Elements of monetary theory; relationships between money, prices, production and employment; factors determining money supply; history and principles of banking, with special references to the United States.

ECO 3271 Topics in Theory (5)
Welfare economics; analysis of factor markets and income distribution; growth theory. Prerequisites: ECO 3101 and ECO 3203.

ECO 3303 Development of Economic Thought (5)
Evolution of economic theory and doctrine. Contributions to economic thought from ancient times to J. M. Keynes. Emphasis on institutional forces shaping the continuum of economic thinking.

ECO 3432 Applied Macroeconomics (5) (F,S,W,SS)
Aggregate economic performance and business conditions analysis. The nature and causes of business fluctuations. Economic expansions and stagflation. Public policies for economic stability; fiscal policy, monetary policy and income policy. Sectoral analysis and macroeconomic forecasting. Recommended preparation: ECO 3003.

ECO 3949 Cooperative Education in Economics (5)
A student majoring in Economics may spend several quarters fully employed in industry or government in a capacity relating to the major.

ECO 4134 Capital Theory (5)
The role of capital in economic analysis. Capital and growth theory—turnpike theorems, applied capital theory and business optimality, capital and distribution theory. Prerequisites: ECO 3101 or ECO 3203 and ECO 4401.

ECO 4224 Issues in Money and Banking (5)
Formulation and execution of monetary policy. Analysis of monetary policy as it has been carried out in recent years, and as it should be conducted.

ECO 4225 Money and National Income Determination (5)
The basic model of income determination is built, emphasizing the roles of real and monetary sectors of the economy. Results of empirical work are surveyed.

ECO 4307 Radical Political Economy (5)
The relationship between Marxist and orthodox economists. Attention given to the New Left and other current criticisms of capitalist economies. Multinational corporate policy, concentration of economic power, income distribution, and Third World development.

ECO 4401 Introduction to Mathematical Economics (5)
Mathematical formulation of economic theory. Mathematical treatment of maximizing and optimizing behavior; applications to consumer and business firm theory, value, economic strategies, growth and stability. Emphasis on understanding of analytical techniques. Recommended preparation: ECO 3101 or ECO 3203, and calculus.

ECO 4417 Measurement and Analysis of Economic Activity (5)
Statistics with special reference to economics, including the following topics: quantitative economics, descriptive statistics, probability and inference, and regression analysis applied to economics. Prerequisites: STA 3161.

ECO 4422 Introduction to Econometrics (5)
Introduction to measurement in economics; numerical evaluation of mathematical models by statistical methods; survey of classical models; discussion of the scope and method of econometric analysis. Recommended preparation: ECO 3101 or ECO 3203 and ECO 4401 and statistics.

ECO 4504 Economics of Government Spending and Taxation (5)
Describes the way resources are allocated in a market economy and cases where markets fail. Analyzes government expenditure policy, principles of taxation, and the various taxes in use today. Prerequisite: ECO 3003.

ECO 4603 Origins of Industrialization (5)
The transformation of modern society. The earliest industrial revolution in England, 1750–1850, and its impact on the European continent.

ECO 4622 Economic Development of the United States (5)
The growth of the American economy from colonial times to the present. Special emphasis on market forces, institutional arrangements, and policies contributing to this process.

ECO 4623 American Business History (5)
The growth of American business from 1880 to present; integration, diversification, and foreign expansion. Business strategies and managerial structures.

ECO 4632 European Economic History (5)
The development of Mediterranean and Western European economies, from the earliest times to the 20th Century. Attention is centered on capital accumulation, technology, trade, industrialization, monetary factors, and the role of government in economic organization.

ECO 4701 World Economy (5)
A broad overview of the international economy in historical perspective. Topics: economic demography, trade flows, capital movements, diffusion of technology, the emergence of transnational institutions. The student obtains a conception of how economic interdependence has developed.

ECO 4703 International Economics (5)
Principles of international trade and balance of payments; significance of geographic, economic, social, and political influences; current problems in international trade and payments: tariffs and commercial policy; role of international organizations. Recommended preparation: ECO 3101.

ECO 4713 International Monetary Relations (5)
International money and capital markets; international financial institutions. Interpretation of balance of payments statements. Adjustments to disequilibria, through changes in prices, exchange rates, and national income. Recommended preparation: ECO 3203.

ECO 4733 Multinational Corporation (5)
Growth and development of multinational enterprise. Theories of direct foreign investment. Impact on the United States and other developed and less developed nations. Policy implications relating to employment, economic growth, balance of payments, taxation, and national defense. National sovereignty and the multinational corporation.

ECO 4902 Undergraduate Tutorial (VAR)
Supervised readings, individual tutorial, and preparation of reports. Requires consent of faculty supervisor and Department Chairperson.

ECO 4949 Cooperative Education in Economics (5)
A student majoring in Economics may spend several quarters fully employed in industry or government in a capacity relating to the major.

ECO 5115 Advanced Seminar in Economic Theory (5)
Variable-topic study group in theoretical problems. Open to seniors and graduate students.

ECO 5216 Monetary Theory and Policy (5)
Relationship of money supply and interest rate to economic stabilization. Consideration of federal reserve system, money market, and factors determining money supply and demand. Neo-Keynesian, Chicago, and radical policy views.

(Continued)

Economics

ECO 5423 Econometric Methods (5)
Application of statistical methods to the estimation of simultaneous equation systems. Special topics including dynamic models, errors in variables, random coefficient regression. Prerequisites: MAC 3233 and STA 3161. Recommended preparation: ECO 4422.

ECO 5701 The World Economy (5)
Designed to give an overview of the crucial issues in the world economy, the course covers trade, capital, labor, and technology flows; transnational economic organizations; current economic crisis; global economic interdependence; and the nature and characteristics of international economic order. Required for MIB Program.

ECO 5906 Advanced Individual Study (VAR)
Supervised readings, individual tutorial, and preparation of report. Requires consent of faculty supervisor and Department Chairperson. Open to seniors and graduate students.

ECO 5938 Advanced Seminar in Applied Economics (5)
Variable-topic study group in application of economic analysis to specific problems. Open to seniors and graduate students.

ECO 6115 Graduate Seminar in Economic Theory (5)
Variable-topic graduate study group in theoretical problems. Open only to students with graduate standing.

ECO 6236 Money and Monetary Policy (5)
Monetary theory and its application. Consideration of central banking in the U.S. and its relation to the international economy, money markets, and financial intermediaries. Survey of current policy views.

ECO 6938 Individual Graduate Study (5–10) (F,W,S,SS)
Supervised readings, tutorial and preparation of report. Open only to graduate students. Requires consent of supervisor and approval of Department Chairperson.

ECP 3123 Economics of Poverty (5)
Poverty in the United States: its measurement and history. Theory of personal income distribution. Present and proposed policies to alleviate poverty.

ECP 3144 Economics of Race and Sex Discrimination (5)
Economic and non-economic implications of discrimination on the basis of race and sex. Discrimination in the labor and commodity markets. Problems of educational training, unemployment, and personal income distribution.

ECP 3303 Introduction to Environmental Economics (5)
Economic principles applied to environmental problems. Relationship of market and nonmarket forces to environmental quality. Development of tools for policy analysis.

ECP 3613 Introduction to Urban Economics (5)
Study of the urban environment, its characteristics and trends. Location behavior of firms and households. Urban financial problems, transportation, and housing.

ECP 3623 Regional Economics (5)
The spatial order of the economy. Systems of cities, industrial location patterns, regional land use, interregional income and trade, regional economic expansion, population and migration.

ECP 4003 Prosperity, Depression and Inflation (5)
Historical analysis of the Great Depression, business cycles, inflation, and prosperity. Emphasis on the theories of economic cycles and inflation.

ECP 4004 Seminar on Current Economic Topics (5)
Faculty and student discussion of contemporary economic and social issues.

ECP 4013 Economics and Diplomacy (5)
Description and analysis of interactions between economic and foreign policy. Free trade vs. protectionism; balance of payments problems; raw material needs and their influence on foreign policy; the "open door" policy; antitrust, taxation, and technology; East-West trade. The approach will be historical.

ECP 4203 Introduction to Labor Economics (5)
Basic introduction to supply and demand for labor. Discusses labor markets in both historical and institutional context emphasizing why certain patterns have occurred and contemporary institutions developed. Prerequisite: ECO 3003.

ECP 4222 Theory of Labor Economics (5)
Neoclassical theory of labor demand and labor supply, human capital theory and critiques. Current programs of human resource development and income maintenance are discussed. Prerequisite: ECO 3101.

ECP 4314 Land and Resource Economics (5)
Availability, use, and control of land and other natural resources. Resource conservation, investment, and taxation. Environmental implications. Resource markets and pricing.

ECP 4403 Economic Policy for Industry (5)
Governmental activities affecting business. Government regulation of business—its historical, legal, and economic perspectives, including recent developments in the United States and abroad. Government assistance to business; proposed policies. Recommended preparation: ECO 3101.

ECP 4433 Economics of Transportation (5)
Economic analysis applied to specific problems of transport. Effects of location and transportation cost on firm behavior; public regulation and policy; capacity, rate structure, service areas; problems of urban mass transportation. Recommended preparation: ECO 3101.

ECP 4515 Economics of Education (5)
The concept of human capital and related topics. Comparison of education, occupation and output. Welfare economics and the finance of education. Productivity and efficiency of education.

ECP 4534 Medical and Health Economics (5)
Economic analysis of medical and health services. Physician and dentist pricing; hospital supply; markets in health-related professions; drug and equipment markets; medical and health insurance; national priorities and policy for health service delivery. Recommended preparation: ECO 3101.

ECP 5605 Urban and Regional Economics (5)
Application of economic analysis to urban growth and the urban-regional environment. Consideration of public services, transportation, ghetto problems, and urban organization. Analysis of environmental protection problems and policies. Recommended preparation: ECO 3101 or ECO 3203 and ECP 3303.

ECP 6704 Managerial Economics I (5) (F,W,S,SS)
Basic microeconomic concepts as they apply to decision making within the organization; supply and demand; market structure and market behavior in specific industries; basic aggregate economic models and forecasting.

ECP 6705 Managerial Economics II (5)
Extension of topics covered in ECP 6704. Includes capital budgeting, linear programming, pricing, decision making under uncertainty, recent developments in theory of the firm. Prerequisite: ECP 6704.

ECS 3003 Comparative Economic Systems (5)
Analysis of alternative economic systems of industralized and emerging nations. Emphasis on the comparative study of the capitalist, socialist, and communist economic systems of the modern world.

(Continued)

English

ECS 3402 The Political Economy of South America (5)
An introduction to the political economy of the Latin American nations. Designed as a basis course to give the student an overview of the political economy of the nations with which we share this hemisphere.

ECS 3440 Economics of Central America (5)
Survey of recent economic history of Central American countries, dealing with the institutional background and the structure of current economic activities. Special attention devoted to current problems of economic growth and social transformation.

ECS 4013 Introduction to Economic Development (5)
Analysis of institutional and structural factors which determine the course of economic progress in developing countries. Characteristics of less developed areas: agriculture, investment, technology, population, international trade, economic integration.

ECS 4014 Theories of Economic Progress (5)
Dynamics of economic progress and change in industrialized and underindustrialized countries of the modern world. Historical theories of growth. Empirical case studies. Formulation of development projects and programs. Recommended preparation: ECO 3101 or ECO 3203.

ECS 4024 Economic Planning (5)
Analysis of planning methods in capitalist and socialist economies. Evaluation of macro and micro economic planning tools (input-output and programming techniques). Theory and practice of economic development planning of agriculture, industrialization, foreign trade, and manpower.

ECS 4044 Economics of Technological Change (5)
Economic analysis of technological possibilities in the production process, and the estimation of production and cost functions. Case studies of research and development (R&D) and technical innovation. Management of science and technology; transfer and adaptation of intermediate and advanced technologies to emerging nations.

ECS 4403 The Latin American Economies (5)
Survey of economic status and problems of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of foreign intervention and dependence, and to different attempts at economic integration.

ECS 4403 Las Economias Latino-Americanas (5)
Estudio de los problemas economicos de Ibero-America, con enfasis en los paises mas grandes. Estudio detallado de problemas de intervencion, dependenia, y integracion economica.

ECS 4404 Economic Integration—Latin America (5)
Analysis of the methods, meaning and implications of economics in Latin America. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation. Prerequisite: ECO 3003, or equivalent.

ECS 4430 The Economic Development of Cuba—Past and Present (5)
Survey of the Cuban economy under capitalist and Marxist ideologies. Emphasis on the transition stage and on current policies of economic and social change.

ECS 4432 Economic Integration—Caribbean (5)
Analysis of the methods, meaning and implications of economic integration in the Caribbean. Designed to enable the student to appreciate the trend toward regionalism and economic cooperation.

ECS 4433 Economics of the Caribbean (5)
Survey of the economic systems of the major British, French, Dutch and Spanish areas in the Caribbean. Special attention devoted to current problems of economic growth and social transformation.

ECS 5025 Economic Problems of Emerging Nations (5)
Specific economic problems of emerging nations and national groupings. Basic approaches to economic development; major proposals for accelerating development. Role of planning. Trade, aid and economic integration. Recommended preparation: ECO 3101 or ECO 3203.

English Major

Donald Watson, *Associate Professor and Acting Chairperson*
Harry T. Antrim, *Professor*
Richard A. Dwyer, *Professor*
Butler H. Waugh, *Professor*
St. George Tucker Arnold, *Associate Professor*
Lynn M. Berk, *Associate Professor*
Charles Elkins, *Associate Professor*
James Hall, *Associate Professor*
Richard Sugg, *Associate Professor*
Mary Jane Elkins, *Assistant Professor*

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION REQUIREMENTS:

Required Courses: A two-semester (or quarter) survey of British or American Literature. This requirement can be fulfilled at FIU.

Remark: The prospective secondary school teacher should take the Foundations of Education courses in the lower division. (Students interested in teacher certification refer to the School of Education, pg. 2.

UPPER DIVISION PROGRAM:

	Quarter Hours
Required Courses: English	45
Electives:	45
	90

The English Department recognizes a continuing obligation to insure that its majors write well. The Chairman may require any English major to take the appropriate composition course. (Hours earned in ENC 3424—Problems in Composition—will *not* count toward the English major.)

An English major may choose to take a general program of English studies or may select one of the Department's three areas of emphasis: literature, language and linguistics, or creative writing. Majors should choose their English courses and electives in consultation with their advisors, especially upon entering the program.

A student in any of the emphases may apply for admission to the Honors Program. Application should be made with the Department Chairperson who will consult with the Honors Committee.

(Continued)

English

Students in the Teacher Preparation Program carry two majors—English and English Education. They must request admission to both programs. (Students interested in teacher certification, refer to the School of Education, page 2.

A grade of C of better in all courses required for the major is necessary for graduation.

Course Descriptions

Definition of Prefixes

AML—American Literature; CRW—Creative Writing; ENC—English Composition; ENG—English-general; ENL—English Literature; HUM—Humanities; LIN—Linguistics; LIT—Literature; MMC—Mass Media Communication.

AML 4144 Periods in American Literature (5)(F,W,S,SS)
Individual sections will read and discuss works in the context of such historical settings as the colonial, federal, antebellum, reconstruction, or other periods of the American past. May be repeated.

AML 5212 Major American Literary Figures (5)(F,W,S,SS)
Each section will consider the lifework of several authors such as Hawthorne, Melville, Whitman, Twain, James, Faulkner, Mailer, Wright, Baldwin, or others.

CRW 4240 Writing Fiction (5)(W,SS)
An intermediate course in writing fiction. Admission requires consent of instructor.

CRW 4340 Writing Poetry (5)(F,S)
An intermediate course in writing poetry. Admission requires consent of the instructor.

ENC 3034 Problems in English Composition (5)(F,W,S,SS)
A composition course designed to improve basic writing skills. Special attention will be paid to grammar, sentence construction, paragraph development, and overall organization.

ENC 3353 Report and Technical Writing (5)(F,W,S)
For business, professional, and scientific students needing practice in collecting, organizing, interpreting, and presenting factual material.

ENC 3453 Expository Writing (5)(F,W,S,SS)
An advanced composition course in the techniques of exposition, argumentation, and persuasion.

ENC 4522 Rhetoric and Poetics (5)
Ancient and modern theory and practice in discussing the formal properties of elevated language.

ENG 3070 Research and Writing (3)(S,F)
This course has dual objectives: to acquaint students with basic research methodologies, and give students practice in communicating the data generated by their research. Assignments will include such matters as researching information, documentation, organization, revising rough drafts and presenting the final draft. The primary emphasis will be on using the student's own interests and background as a source of relevant topics upon which to write.

ENG 3101 Major Literary Modes (5)(F,W,S)
Individual sections will read and discuss the literary expression of heroic, tragic, comic, satiric, mythic, realistic or other formalized views of human existence. May be repeated.

ENG 3137 The Movies (5)(F,S)
Viewing and discussion of films, with attention to cinematic ways of story-telling and to the popular film as an expression of cultural values.

ENG 3500 English Linguistics (5)(F,W)
Study of the sounds, vocabulary and sentence patterns of standard modern English. Other topics include meaning, social and regional dialects, language change, and style.

ENG 3949 Cooperative Education in English (5)
A student majoring in English may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

ENG 4949 Cooperative Education in English (5)
A student majoring in English may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

ENG 4103 Major Literary Genres (5)(F,W,S,SS)
Individual sections will read and discuss the form and development of novels, drama, poetry, short fiction, or such special forms as biographies, folksongs and tales, or essays, among other genres. May be repeated.

ENG 4134 History of the Film (5)
Discussion, with examples, of the development of cinematic art, from its European and American beginnings to its place as a major world art form.

ENG 4141 Studies in the Film (5)
Intensive examination of the work of a particular industry, group, or director. May also explore various film genres, e.g., documentary, horror, the Western. With change of content, may be retaken for credit.

ENG 4151 Structure and Function of Mass Media (5)
Will include the study of such topics as: mass communication and society, popular culture, communication and social order, classic studies in mass communication, propaganda, mass media and government, and problems of the mass media. Topics will vary from quarter to quarter.

ENG 4555 Modern English Grammar (5)
Practical study of syntax. Prerequisite: ENG 3500, or consent of the instructor.

ENG 4574 Black English (5)
This course is a linguistic approach to the characteristics and functions of Black English and the current social controversies surrounding it.

ENG 4906 Independent Study (Variable)(F,W,S,SS)
Individual conferences, assigned readings, and reports on independent investigations, with the consent of the Chairperson.

ENG 5517 History of the English Language (5)(S)
Study of the development of the grammar and vocabulary represented in samples of the English language from the 8th century to modern times. Prerequisite: ENG 3500, or consent of the instructor.

ENG 5816 Literary Criticism and Scholarship (5)
Techniques and goals of humanistic research, bibliography, and critical commentary.

ENG 5907 Independent Study (Variable)(F,W,S,SS)
Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.

ENG 6909 Independent Study (Variable)(F,W,S,SS)
Individual conferences, assigned readings, reports on independent investigations, with the consent of the Chairperson.

ENL 4137 Shakespeare: Histories (5)(S)
Reading and informal dramatic interpretation of representative plays.

ENL 4138 Shakespeare: Comedies (5)(F)
Reading and informal dramatic interpretation of representative plays.

ENL 4139 Shakespeare: Tragedies (5)(W)
Reading and informal dramatic interpretation of representative plays.

(Continued)

Environmental Studies

ENL 4540 Periods in English Literature (5)(F,W,S)
Individual sections will read and discuss works in the context of such historical settings as the medieval, Tudor, Restoration, Victorian, and other periods of the English past. (May be repeated.)

ENG 5220 Major British Literary Figures (5)(F,W,S,SS)
Each section will consider the lifework of an author such as Chaucer, Spenser, Milton, Pope, Wordsworth, Dickens, Browning, Joyce, or others. May be repeated.

LIN 4400 Applied Linguistics (5)
Linguistics in the classroom. English as a second language. Stylistics. Dialects.

LIT 3333 Survey of Afro-American Literature (5)
Study of Afro-American literature from Phyllis Wheatley to James Baldwin. The first half of the course will be concentrated on writers before World War II while the second half will give students the opportunity to study authors from 1920 to present.

LIT 3510 Themes in Literature (5)(F,W,S,SS)
Individual sections will read and discuss works relating to topics of current and enduring interest. Discussion of literature as it reflects the identities of men and women: their places in families, in past, present, and future societies, in the natural world, and the cosmic order. May be repeated.

LIT 3930 Special Topics (Variable)(F,W,S,SS)
A course designed to give students an opportunity to pursue special studies not otherwise offered. Requires consent of the Chairperson.

LIT 4290 Regional Literature in English (5)
Individual sections will discuss English writing in Ireland, Scotland, Wales, Canada, the Caribbean, India, sub-Saharan Africa, and Oceania, as well as distinctive regions in England and America. May be repeated.

LIT 4349 Rhetoric and Communication: Black Rhetoric (5)
Black people in America have been involved in several significant movements designed primarily to meet the challenges of institutionalized racism. The course will focus on these movements, i.e., abolition, segregation, integration, and emigration, giving special emphasis to each of the movements' leading rhetors, their arguments, counter-arguments, and appeals.

LIT 4401 Literature Among the Arts and Sciences (5)
Individual sections will relate the study of literature to other disciplines in the humanities, fine arts, the social and natural sciences. May be repeated.

LIT 4930 Special Topics (Variable)(F,W,S,SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the Chairperson.

LIT 5542 Literary Movements (5)(F,W,S)
Individual sections will study the authors, works, and audiences involved in such phenomena as Humanism, Mannerism, Romanticism, Symbolism, the Harlem Renaissance, and others. May be repeated.

LIT 5934 Special Topics (Variable)(F,W,S,SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the Chairperson.

LIT 6934 Special Topics (Variable)(F,W,S,SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered. Requires consent of the Chairperson.

Environmental Studies

Dr. T. Pliske, Director, *Physical Sciences/ Biological Sciences*
Dr. K. Boodhoo, *International Relations*
Dr. J. Brown, *Anthropology*
Dr. R. Clem, *International Relations*
Dr. W. Goldberg, *Biological Sciences*
Dr. J. Gottlieb, *Political Science*
Dr. K. Hardy, *Physical Sciences*
Dr. A. Herriott, *Physical Sciences*
Dr. J. Huchingson, *Philosophy/Religion*
Dr. F. Jhabvala, *International Relations*
Dr. F. Maurrasse, *Physical Sciences*
Dr. H. Moore, *Physical Sciences*
Dr. J. Parker, *Physical Sciences*
Dr. J. Rotton, *Psychology*
Dr. J. Sheldon, *Physical Sciences*
Dr. K. Williams, *Physical Sciences*

This is an interdisciplinary program, involving eight departments in the College of Arts and Sciences (Physical Sciences; Biological Sciences; Psychology; Political Science; Anthropology/Sociology; International Relations; Philosophy/Religion; and Economics), which prepares students to work in professions with an environmental emphasis. Students may choose either a Bachelor of Arts (non science) program or a Bachelor of Science (science) program. Degrees are awarded by the Department of Physical Sciences.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Recommended Courses: Natural History of South Florida; Conservation of Natural Resources; Man and Environment; College Algebra.

UPPER DIVISION PREPARATION:

Required Courses: ECO 3003 - Economics, Man, and Society; POS 4044 - Government and Politics of the United States.

UPPER DIVISION PROGRAM:

Required Courses: 45

ANT 3403	Cultural Ecology	5
ECP 3303	Introduction to Environmental Economics	5
EVR 3011-3012-3013	Environmental Science	15
EVR 4920	Environmental Colloquium	5
EVR 4905	Independent Study or Community Project	5
PHM 4030	Man and Nature	5
PUP 4203	Environmental Politics and Policies	5

Area of Specialization Courses: 15

The student must take three courses from one of the areas below.

Energy and Resource Management

ANT 3263	World Food Supply
ECP 4314	Land and Resource Economics
EVR 4311	Energy Resources (required for this concentration)
GEO 3510	Earth Resources
GLY 3106	Environmental Earth Sciences
INR 4054	World Resources, World Order

(Continued)

Environmental Studies

Human Ecology

ANT 4261	Environmental Revitalization	
DHE 3300	Human Ecology	
PHR 4931	Technology and Human Values	
POS 4154	Topics in Urban Politics: Urban and Environmental Planning	
SOP 4712	Environmental Psychology	

International/Political Issues

INR 3043	Population and Society	
INR 4044	World Population Problems	
INR 4054	World Resources and World Order	
POS 4933	Environmental Planning and Law	
PUP 3206	International Law and the Environment	

In exceptional circumstances, the student, in consultation with an environmental advisor, may substitute approved courses for Area of Specialization requirements.

Electives **30**

90

A grade of C or better in all courses required for the major is necessary for graduation.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Equivalent of 8 semester hours of general biology and general chemistry; 3 semester hours of algebra and trigonometry.

Recommended Courses: General Physics, Physical Geology, Conservation of Natural Resources, Man and Environment, Calculus.

Lower or Upper Division Requirements: ECO - Economics, Man and Society; POS 4044 - U.S. Government and Politics; COP 3110 - Introduction to Computers; STA 3122 - Introduction to Statistics.

UPPER DIVISION PROGRAM:

Required Courses: **47**

CHM 3120	Quantitative Analysis *or*	7
EVS 3420C	Environmental Instrumentation	
ECP 3303	Introduction to Environmental Economics	5
EVR 3013	Environmental Science III: Ecology of South Florida	5
EVR 4211	Water Resources	5
EVR 4231	Air Resources	5
EVR 4311	Energy Resources	5
EVR 4920	Environmental Colloquium *or*	5
EVR 4905	Independent Study	5
PCB 3043	Fundamentals of Ecology	5
PUP 4203	Environmental Politics and Policy	5

Electives:

Additional courses may be taken in consultation with an advisor in a particular area of emphasis such as:

1. Energy and Resources
2. Aquatic Ecology
3. Terrestrial Ecology
4. Air Resources

Energy and Resources Courses

CHM 3400	Physical Chemistry for Life Sciences	5
ETM 4225C	Energy Systems	5
GEO 3510	Earth Resources	5
GLY 3215	Mineralogy	5

Aquatic Ecology Courses

EVS 3219C	Aquatic Systems	5
MCB 3000	Introductory Microbiology	7
MCB 3023	General Microbiology	7
OCB 3010	Biological Oceanography	5
OCB 5635	Marine Ecology	5
OCE 3014	Physical Oceanography	5
ZOO 3253	The Invertebrates	5

Terrestrial Ecology Courses

BOT 3503	Introduction to Plant Physiology	5
BOT 3663	Topics in Tropical Botany	5
ENY 3004	Entomology	5
MCB 3023	General Microbiology	7
MET 4701	Meteorology	5
PCB 4324	Terrestrial Ecology	7

Air Resources Courses

CHM 3200	Survey of Organic Chemistry	7
CHM 3400	Physical Chemistry for the Life Sciences	5
EVR 5236	Air Pollution Dynamics	5
MET 4701	Meteorology	5

A grade of C or better in all courses required for the major is necessary for graduation.

Master's Program in Environmental and Urban Systems

Students wishing advanced training in environmental studies may apply to enter the M.S. program in environmental and urban systems, sponsored in cooperation with the School of Technology. The following options or tracks are available in the M.S. program:

Environmental Quality
Urban Planning Systems
Aquatic Resources
Air Resources
Energy Systems

For further information and a complete description of the course offerings, see MASTER OF SCIENCE DEGREE PROGRAM listed separately under Engineering Technology in the School of Technology.

Cooperative Education

Students seeking the baccalaureate degree in environmental studies may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends several quarters fully employed in industry or a governmental agency. For further information consult the Department of Physical Sciences, or the Department of Cooperative Education.

Course Descriptions

Definition of Prefixes

ANT–Anthropology; BOT–Botany; CHM–Chemistry; DHE–Demography and Human Ecology; ECP–Economic Problems and Policy; ENY–Entomology; ETM–Engineering Tech.: Mechanical;EVR–Environmental Studies; EVS–Environmental Science Technology; GEO–Geography-Systematic; GLY–Geology; INR–International Relations; ISC–Interdisciplinary Natural Science; MCB–Microbiology; MET–Meteorology; OCB–Oceanography: Biology; OCE–Oceanography; PCB–Process Cell Biology; PHM–Philosophy of Man and Society; PHR–Interdisciplinary Philosophy/Religion; POS–Political Science; PUP–Public Policy; SOP–Social Psychology; ZOO–Zoology.

ANTHROPOLOGY

ANT 3403 Cultural Ecology (5)

ANT 3263 World Food Supply (5)

ANT 4261 Environmental Revitalization (5)

BIOLOGICAL SCIENCES

(Continued)

Environmental Studies

BOT 3503 Introduction to Plant Physiology (5)
BOT 3663 Topics in Tropical Botany (5)
BOT 5665 Topics in Tropical Plant Science (5)
BOT 5665L Topics in Tropical Plant Science Laboratory (2)
ENY 3004 General Entomology (5)
ENY 3004L General Entomology Laboratory (2)
MCB 3000 Introductory Microbiology (5)
MCB 3000L Introductory Microbiology Laboratory (2)
MCB 3023 General Microbiology (5)
MCB 3023L General Microbiology Laboratory (2)
OCB 3010 Biological Oceanography (5)
OCB 5635 Marine Ecology (5)
PCB 3043 Fundamental Ecology (5)
PCB 3043L Fundamental Ecology Laboratory (2)
PCB 4324 Terrestrial Ecology (5)
PCB 4324L Terrestrial Ecology Laboratory (2)
OCB 5635 Marine Ecology (5)
OCB 5635L Marine Ecology Laboratory (2)
ZOO 3253 Marine Invertebrate Zoology (5)
ZOO 3253L Invertebrates Laboratory (2)
ZOO 3423 Amphibians and Reptiles (5)
ZOO 3433 Birds and Mammals (5)
ZOO 3513 Ethology (5)

ECONOMICS

ECP 3303 Introduction to Environmental Economics (5)
ECP 4314 Land and Resource Economics (5)

PHYSICAL SCIENCES–ENVIRONMENTAL STUDIES

EVR 3011 Environmental Science I (5)
EVR 3012 Environmental Science II (5)
EVR 3013 Environmental Science III: Ecology of South Florida (5)
EVR 3931 Topics in Environmental Studies (5)
EVR 4021 Survey of Environmental Problems I (5)
EVR 4022 Survey of Environmental Problems II (5)
EVR 4211 Water Resources (5)
EVR 4231 Air Resources (5)
EVR 4311 Energy Resources (5)
EVR 4905 Research and Independent Study (VAR)
EVR 4920 Environmental Colloquium (5)
EVR 5061 South Florida Ecology: Field Studies (3)(W,S)
EVR 5141 Environmental Nuclear Chemistry (5)
EVR 5236 Air Pollution Dynamics (5)
EVR 5907 Research and Independent Study (VAR)
EVR 5935 Special Topics (VAR)(W)
EVR 5936 Topics in Environmental Studies (5)
MET 4701 Meteorology (5)
Policy: Urban and Environmental Planning (5)
POS 4933 Environmental Planning and Law (5)
PUP 4203 Environmental Politics and Policy (5)

PSYCHOLOGY

SOP 4712 Environmental Psychology (5)

INTERNATIONAL RELATIONS

INR 3043 Population and Society (5)
INR 4044 World Population Problems (5)
INR 4054 World Resources and World Order (5)
PUP 3206 International Law and the Environment (5)

PHILOSOPHY AND RELIGIOUS STUDIES

PHM 4030 Man and Nature (5)
PHR 4931 Technology and Human Values (5)

PHYSICAL SCIENCES–CHEMISTRY

CHM 3120 Quantitative Analysis (5)
CHM 3120L Quantitative Analysis Laboratory (2)
CHM 3200 Survey of Organic Chemistry (5)
CHM 3200L Survey of Organic Chemistry Laboratory (2)
CHM 3400 Physical Chemistry for the Life Sciences (5)
CHM 3400L Physical Chemistry for the Life Sciences Laboratory (2)

PHYSICAL SCIENCES–EARTH SCIENCE

EVS 4164 Applied Environmental Geology (5)
EVS 4164L Applied Environmental Geology Laboratory (1)
GEO 3510 Earth Resources (5)
GLY 3106 Environmental Earth Sciences (5)
GLY 3215 Mineralogy (5)
GLY 3215L Mineralogy Laboratory (1)
GLY 3850 Environmental Geology (5)
GLY 3850L Environmental Geology Laboratory (1)
OCE 3014 Physical Oceanography (5)

POLITICAL SCIENCE

POS 4154 Topics in Urban Politics and Policy: Urban and Environmental Planning (5)
POS 4933 Environmental Planning and Law (5)
PUP 4203 Environmental Politics and Policy (5)

PSYCHOLOGY

SOP 4712 Environmental Psychology (5)

SCHOOL OF TECHNOLOGY COURSES

ETM 4225C Energy Systems (5)
EVS 3219C Aquatic Systems (5)
EVS 3420C Environmental Instrumentation (5)

(Continued)

History

History Major

Howard Kaminsky, *Professor and Chairperson*
Eric Leed, *Associate Professor*
Brian Peterson, *Associate Professor*
Howard Rock, *Associate Professor*
Joyce Peterson, *Assistant Professor*
Darden Asbury Pyron, *Assistant Professor*
Mark D. Szuchman, *Assistant Professor*

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts* (*Students interested in teacher certification refer to the School of Education, page 2.

LOWER DIVISION PREPARATION:

Required Courses: None

Remark: 6 semester hours of advanced history courses may be counted toward the upper division major.

UPPER DIVISION PROGRAM:

Major:

	Quarter Hours
Required Courses:	
HIS 3001 Introduction to History or	5
HIS 3104 Ideas and Methods of History	5
Courses in the following areas:	
1. Medieval History	5
2. Modern European History	5
3. U.S. History	5
4. Asian, African, Latin American or Caribbean History	5
General History Courses	20
These categories are indicated by bracketed numbers at the end of each course description.	45
Electives:	45
	90

Minor:

	Quarter Hours
Required Courses:	
HIS 3001 Introduction to History	5
General History Courses	20
	25

A grade of C or better in all courses required for the major is necessary for graduation.

Course Descriptions

Definition of Prefixes

AMH–American History; EDF–Education: Foundations; EUH–European History; HIS–General; LAH–Latin American History; WOH–World History.

AMH 3130 The American Revolution (5)
An exploration of the nature of the Revolution from the beginning of the conflict in 1763 through the ratification of the Constitution in 1789. Discussion of the political and economic differences between the colonists and England, along with the meaning that the war had to the different classes of Americans.[3]

AMH 3170 Civil War and Reconstruction (5)
The course will examine the rise and sources of militant sectionalism in the United States, the war itself, and the restoration of the nation. [3]

AMH 3251 The Great Depression (5)
This course deals with the experience of the American people in the Great Depression of the 1930s. It examines causes of the depression, government response, and effectiveness of response, as well as looking at the actual daily experience of people during the depression and the changes the depression made in U.S. society. [3]

AMH 3270 Contemporary U.S. History (5)
An examination of major trends, forces and personalities that have shaped the recent American past. [3]

AMH 3275 The Kennedy Era (5)
This course will explore the Kennedy image and the reality of the Kennedy family's impact within the context of recent American political and social history. [3]

AMH 3317 America and the Movies (5)
An examination of the social and cultural history of 20th century America through its movies. [3]

AMH 3331 American Intellectual History I (5)
This course will trace the origins and development of the main ideas and intellectual themes of Anglo-American history during the colonial and early national period, 1600-1815. It will stress social ideas and popular concepts, and relate them to the formation of dominant American national characteristics. [3]

AMH 3332 American Intellectual History II (5)
This course will emphasize the full flowering of individualistic liberalism in 19th century American thought, and trace the implications of and reaction against this tradition down to the present. [3]

AMH 3354 American Presidents: Washington to McKinley (5)
This course will examine the personalities, policies and politics of American presidents in the 18th and 19th centuries. [3]

AMH 3355 Twentieth Century American Presidents (5)
This course will examine the personalities, policies and politics of American presidents from Theodore Roosevelt to the present. [3]

AMH 3420 Florida History (5)
A history of Florida from the time of the Indian until today. The course covers political, economic, social and cultural developments; it devotes special attention to the dependent position of Florida in the national economy, and the impact of this dependence on resources and people. [3]

AMH 3428 Miami Social History (5)
An examination of the history of South Florida and the ethnic groups which make up the Miami population, particularly Blacks, Jews, Cubans and white southerners. [3]

AMH 3440 The Great American West (5)
The course will explore the meaning of the West for both the settlers and modern Americans. Using song, film, novels, art, etc., the course will examine the lives and values of the Indians, mountain men, farmers, ranchers, and cowboys. [3]

AMH 3500 United States Labor History (5)
A history of the experience of working class people in the United States and of the trade union movement from colonial times to the present. [3]

AMH 3560 History of Women in the United States (5)
A survey of the changing dimensions of women's lives from the colonial era of U.S. history to the present. The course will examine the changing economic, social and political position of women as well as the development of feminist movements and organizations. [3]

AMH 3570 Afro-American History (5)
A survey of Black society in the United States and its relation to the political, economic, social and cultural history of America. [3]

AMH 4025 The United States in the 19th Century (5)
This course will cover the period characterized

(Continued)

History

by "laissez faire" ideology, from Jackson to McKinley. It will focus upon developments in national politics and the ways in which they reflect economic growth and changes in the social structure. [3]

AMH 4030 Twentieth Century United States History (5)
This course will cover the history of the U.S. from the election of McKinley in 1896 to the Watergate crisis of the 1970s. [3]

AMH 4110 Colonial U.S. History, 1600–1750 (5)
This course will examine the American colonial experience from the earliest settlements at Jamestown and Plymouth to the eve of the American Revolution. Particular emphasis will be on religion, social structure, politics and slavery. [3]

AMH 4150 The U.S. in the National Period, 1750–1830 (5)
An examination of American history from the American Revolution through the Age of Jackson. This course will emphasize the growth of democratic politics and political parties, the spirit of nationalism, the problem of slavery, and the westward movement. [3]

AMH 4930 Topics in U.S. History (5)
An examination of selected topics of themes in U.S. history. The themes will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [3]

EDF 3521 Education in History (5)
An examination of the concepts of childhood, and processes of social initiation in differing historical contexts.

EUH 3100 The Ancient Near East (5)
A survey of the history of ancient Mesopotamia, Egypt and Israel. The course will stress the interaction of social structure with religion in each of the three societies.

EUH 3142 Renaissance and Reformation (5)
A study of the development of humanism in Italy and Protestantism in Germany, and the impact of these new philosophies on Europe in the fourteenth, fifteenth and sixteenth centuries. [2]

EUH 3186 History of King Arthur and the Knightly Legend (5)
A study of Arthurian romance from the 12th to the 15th centuries, as the self-image of aristocracy. The following themes will be emphasized: chivalry, adventure, erotic idealism, Christian consecration and the creation of secular individualism. [1]

EUH 3203 Europe in the 17th Century (5)
An examination of the "radical century" which defined many of the values of the modern age: the work ethic, the scientific view of nature, the notion of market society, the modern state, and bourgeois ideology. The course will emphasize the Puritan Revolution in England and rise of absolute monarchy in France. [2]

EUH 3420 Greece and Rome (5)
An examination of the society, politics and culture of Ancient Greece and Rome.

EUH 4006 Modern Europe, 1789-Present (5)
An examination of European history from the French Revolution until today, with special attention to liberalism, nationalism, socialism, communism and fascism. The course will touch on the main points of the national histories of the various European states, from Britain to Russia. [2]

EUH 3452 The French Revolution and the Enlightenment (5)
An examination of the intellectual and social origins of the French Revolution, focusing upon the old regime in France, the ideas of Rousseau and the philosophies and traditions of social protest in the 18th century. [2]

EUH 3460 Germany from Charlemagne to Hitler (5)
An overview of German history with special emphasis on the development of the National Socialist movement. Political, economic, social, cultural and religious aspects of German history will be covered. [2]

EUH 3570 Russian History (5)
An overview of Russian History from the time of tribal Slavs until today. The course will focus especially on the changing conditions of the Russian peasantry and on the unique development of the Russian state. [2]

EUH 3576 The Russian Revolution and the Soviet Union (5)
This course deals with Russia since 1917 and focuses particularly on the theory and practice of communism in the Soviet Union. The impact of communism on the lives of the people, whether in politics, economics, or culture, will be examined. [2]

EUH 3601 Medieval Culture (5)
Selected topics in the cultural history of Europe from 500 to 1500: epic and knightly romance; Christian theology and spirituality; scholastic philosophy; Romanesque and Gothic arts; the rise of literature in the vernacular; the culture of the layman; and the contribution of women. [1]

EUH 3611 European Cultural History (10)
An examination of changes in the social and political structure of Europe through film, art and literature. This is an introductory course to both European social history and cultural history in the last two hundred years. [2]

EUH 4121 Europe in the Earlier Middle Ages (5)
A history of Europe from the fall of the Roman Empire in the West (ca. 500 AD) to the first Crusade (1095). The formation of feudal society, the military upper class, the imperial papacy, the monastic order, the interplay between Christian and worldly ideals. [1]

EUH 4123 Europe in the Later Middle Ages (5)
Europe from the twelfth through the fifteenth centuries. The formation of territorial states and an aristocratic order of status: Romanesque and Gothic arts; courtly romance and chivalry; development of subjectivity and individual self-consciousness; heresy, inquisition, and social revolution. [1]

EUH 4187 Topics in Medieval European History (5)
An examination of selected topics or themes in Medieval history. The themes will vary from quarter to quarter. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [1]

EUH 4200 Early Modern Europe, 1500–1650 (5)
An examination of the major events and movements which signaled the beginning of modernization in Europe: the voyages of discovery, the new representations in art, and the rise and triumph of religious dissent. [2]

EUH 4201 Early Modern Europe 1650–1789 (5)
An examination of European society as it developed between the English Civil War and the French Revolution. The consolidation of the "Old Regime." [2]

EUH 4205 Modern Europe, 1789–1900 (5)
This course will examine the two major revolutions which have shaped our time: the French Revolution and the Industrial Revolution. Beginning with Rousseau, the course will explore industrializing England, and end with an analysis of European politics and culture on the eve of World War I. [2]

EUH 4206 Modern Europe, 1900-Present (5)
An examination of Europe from the first World War to the present. The course will explore the impact of industrialization, the World Wars, and the rise of fascism and communism. [2]

(Continued)

History

EUH 4286 Topics in European History (5)
An examination of selected topics or themes in early modern and modern European history. The themes will vary from quarter to quarter. With a change in content, the course may be repeated. (The theme will be announced in the yearly schedule). [2]

HIS 3001 Introduction to History (5)
Approaches to the study of the Western tradition. Required of all majors and those seeking certification to teach history.

HIS 3104 Ideas and Methods of History (5)
An overview of the philosophy and treatment of history through the ages and of modern methods to research it. Can be substituted for HIS 3001 to fulfill major and certification requirements.

HIS 3244 History of Communism (5)
A survey of the history of communism from the writings of Marx through the Soviet, Chinese, and Cuban revolutions. The course will consider communism both in theory and in practice.

HIS 3308 War and Society (5)
An examination of the ways societies have organized themselves for external and internal wars. The course will also explore the changing conduct of war, the image of the warrior, and the ways in which military institutions have crystalized class structures.

HIS 3473 The History of Science and Technology (5)
This course will examine the history of western civilization in terms of the development of science and technology. It will focus upon the invention of new techniques and productive processes, and upon the way technology and science have shaped western society, particularly in regard to art and ideas.

HIS 3930 Special Topics (VAR)
An examination of specific themes or topics in history. The theme will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule).

HIS 4908 Independent Study (VAR)
Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

HIS 4930 Special Topics (VAR)
An examination of specific themes or topics in history. The theme will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule).

HIS 5289 Comparative History (5)
A study of specific topics in history that cut across regional, national and chronological lines. The topics will change from quarter to quarter, and with a change in content, the course may be repeated. (The topic of the course will be announced in the yearly schedule).

HIS 5908 Independent Study (VAR)
Individual conferences, assigned readings and reports on independent investigations, with the consent of the instructor.

HIS 5910 Advanced Research and Seminar (5)
Small group sessions which will analyze particular subject areas in history, with the consent of the instructor.

HIS 5930 Special Topics (VAR)
An examination of specific themes or topics in history. The theme will vary from quarter to may be repeated. (The theme will be announced in the yearly schedule).

LAH 3020 Introduction to Latin American History (5)
This course is an introduction to the history of the major social, cultural and political institutions of Latin America. It covers both the colonial and national periods of leading Latin American countries. [4]

LAH 3410 Mexico and the Caribbean (5)
An overview of the themes that have generated the histories of several nations in and around the Caribbean since the nineteenth century. [4]

LAH 3482 Cuba from Bourbons to Castro (5)
An overview of the socio-economic and political setting in Cuba since the mid-nineteenth century. [4]

LAH 4132 Colonial Latin America: The Formative Period (5)
An examination of Latin America in the formative period, focusing upon the Iberian experiences, conquest, reconquest, ethnic amalgamation, and Latin American economy and social organization in the 15th and 16th centuries. [4]

LAH 4133 Colonial Latin America: The Mature Period (5)
An examination of Colonial Latin America in the 17th and 18th centuries. The course will focus upon the formation of the landed estate, urban functions, labor, Indian relations, the Church, and the Enlightenment. [4]

LAH 4201 Latin America: The 19th Century (5)
A review of important issues of nation-building in the more influential Latin American countries. Topics will include federalism, centralism, immigration, economic development, and imperialism. [4]

LAH 4300 Latin America: The Modern Period (5)
A review of topics in the histories of selected Latin American nations that have developed since the late 19th century, including discussion of race relations, dictatorship, modernization, capitalism, and leftist and rightist solutions. [4]

LAH 4474 Topics in Caribbean History (5)
An examination of selected topics or themes in Caribbean history. The themes will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [4]

LAH 4511 Argentina, 1776 to the Present (5)
A survey of the social and political formation of the Argentine nation, starting with the colonial legacy and ending with the contemporary political situation. [4]

LAH 4932 Topics in Latin American History (5)
An examination of selected topics or themes in Latin American history. The themes will vary from quarter to quarter. With a change in theme, the course may be repeated. (The theme will be announced in the yearly schedule). [4]

WOH 3002 History of Western Civilization (5)
An overview of Western Civilization from the Ancient Near East until today, with special attention to the social structures and values as they developed over time. Literature, art, philosophy and other aspects of culture will be examined through readings, art slides, films and lectures in order to develop a comprehensive view.

WOH 3244 The World Since Hitler, Stalin and Roosevelt (5)
An examination of the world-wide political struggle between capitalism and communism. The course will stress domestic as well as international power-political rivalries. Special emphasis will be given to Japan, China, Cuba, France, the United States, India, and Eastern Europe.

(Continued)

Humanities

WOH 3280 Women's History (5)
A survey of the position of women in the major world civilizations. The course examines the position of women from the stone age to the present, with particular attention to both women's actual function in society and the ideal definition of womanhood in different societies.

WOH 3283 Jewish History (5)
A survey of the major currents of Jewish history.

WOH 3300 Third World Civilizations (5)
An overview of the civilizations of Asia, Africa and Latin America from ancient times until today, with special attention to the social structures and values of each civilization. Literature, art, philosophy and religion will be examined through readings, art slides, films and lectures in order to develop a comprehensive view. [4]

Humanities Major

Charles Elkins, *Associate Professor of English and Director of Humanities*
Barbara Forbes, *Assistant Professor of Art*
Kenneth Henley, *Assistant Professor of Philosophy*
Ramon Mendoza, *Professor of Modern Languages*
Joyce Peterson, *Assistant Professor of History*
Richard P. Sugg, *Associate Professor of English*

The Humanities program at F.I.U.'s North Miami campus offers a well-structured, interdisciplinary curriculum. The goal envisioned by this program is to confront the student with those values and issues concerning man and society which extend beyond the scope of both natural and social sciences, and which cannot be adequately described and analyzed by the methodologies of these sciences.

The Humanities focus primarily upon the nature of man and his values, as well as upon his major concerns in society and his views of the world. These concerns are now, and have been through the ages, the preferred object of thought of philosophers, poets, dramatists, fictionists and mystics. Their views, manifested primarily in written texts, have become the reservoir of mankind's most outstanding intellectual achievements. Such texts include the works of painters, musicians, and sculptors, as well as the productions of mass media and popular culture which must now engage the serious student of our century's culture and its future.

The Humanities program, however, will not be merely theoretical. It seeks to develop in the student those skills and attitudes which are more specifically human. These are primarily all skills of verbal and written communication, analytical skills, and open-minded and critical attitudes towards the problems of our changing society. Also, the development of artistic sensitivity and expression, and of all forms of imaginative creativity, will be main targets of our program. Above all, the program hopes to challenge the student to become a decisive factor in raising the cultural level of our society by bringing his or her humanistic approach to bear upon its individuals, institutions, and cultural programs through the mass media. The program will be particularly useful to students who wish to pursue post-graduate degrees requiring a general educational background, such as Law School, International Relations, and all the traditional Liberal Arts programs.

A grade of C or better in all courses required for the major is necessary for graduation.

LOCATION: North Miami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Recommended Courses: a basic interdisciplinary survey of Western civilization, including the Ancient, Renaissance and Modern worlds; foreign language; English composition and literature.

UPPER DIVISION PROGRAM:

Seven Humanities courses (35 hours) distributed among the following areas:

HUM 3225 Introduction to Humanities: Ancient World
HUM 3226 Introduction to Humanities: Medieval/Renaissance World
HUM 3230 Introduction to Humanities: Modern World
HUM 4920 Humanities Colloquium

Three courses chosen from among the following:

HUM 3024 Introduction to the Humanities
HUM 3026 The Modern World
HUM 3302 & 3872 & 3891 Perspectives in the Humanities
HUM 3813 & 3941 Applied Humanities
HUM 4391–4542 Major Human Concerns
HUM 4496 Latin American Civilization
HUM 4450 & 4491 Cultural Heritages and Changes
HUM 4406 Film Artists
HUM 4906 Humanities Independent Study

Four Elective discipline courses (20 hours), chosen from all those offered by:
Philosophy & Religion
History
Fine Arts

Seven general electives (35 hours)
These courses may be taken outside of the major.

Language Requirement:

Students must demonstrate a reading knowledge of a language other than their native tongue equivalent to the end of the third quarter of beginning language instruction. This requirement may be satisfied by completing 15 hours of language instruction or by passing a competency examination administered by the Department of Modern Languages.

Course Descriptions

Definition of Prefixes
HUM–Humanities
The Humanities faculty will offer courses in the following:

HUM 3024 Introduction to Humanities (5)
This course introduces the student to the methodologies of the various humanistic disciplines and exposes the student to the ways in which research and scholarship in the humanities are communicated.

HUM 3026 The Modern World (5)
This course focuses on crucial issues and prospects in the contemporary world which are of concern to humanists.

HUM 3225 Introduction to the Humanities: Ancient World (5)
This course traces some humanistic concerns of man from pre-historic times through Greek and Roman civilizations.

HUM 3226 Introduction to the Humanities: Medieval/Renaissance World (5)
This course focuses on issues in the humanities as they evolved from the fall of the Roman Empire to the end of the Renaissance.

HUM 3230 Introduction to the Humanities: Modern World (5)
The objectives of this course are to examine the major issues confronting humanists in the contemporary world.

(Continued)

International Relations

HUM 3813 & 3941 Applied Humanities (5)
In these courses, the faculty and students will attempt to answer questions such as: What is the role of the Humanities in social change? . . . in the formation of individual and collective psychologies? . . . in artistic creativity and scientific experimentation? How can the skills in verbal and written communication that the Humanities teach be applied in the contemporary world?

HUM 3872 & 3302 & 3891 Perspectives of the Humanities (5)
Courses in this area will focus upon specific topics which involve a study of the nature and methods of the Humanities; the role and relationship of the Humanities to mass media; the functions of the Humanities in democratic and socialist countries; the relationships of the Humanities to science, technology, and the professions.

HUM 3949 Cooperative Education in Humanities (5)
A student majoring in Humanities may spend several quarters fully employed in industry in a capacity relating to the major.

HUM 4450 & 4491 Cultural Heritages and Cultural Changes (5)
The focus here will be upon varieties of culture in the past and present—literary culture and media culture, for example—upon cultural evolution and revolution; upon ethnicity and pluralism; upon subcultures and countercultures.

HUM 4542 & 4391 Human Concerns (5)
Courses under this heading will concentrate upon various concepts of the study of human nature and human society; the place of the religious and the erotic; work, play, and leisure; human rights and social policies; and man's vision of his future.

HUM 4920 Colloquium (5)
The colloquium will provide a forum for discussion of contemporary issues and problems about which the Humanities should have important things to say. Faculty and students will pursue the meaning and future of the Humanities in an industrial and technological society, in the education processes and social institutions of today.

HUM 4949 Cooperative Education in Humanities (5)
A student majoring in Humanities may spend several quarters fully employed in industry in a capacity relating to the major.

COURSES IN RELATED DISCIPLINES
Humanities majors should develop their programs of study by choosing courses in English, History, Philosophy, Religion, and Modern Languages that will add to their skills in communication, broaden their knowledge of the arts and literature, and increase their understanding of their cultural past. The Humanities faculty will work closely with the students to tailor each program of study to particular interests and needs.

International Relations Major

Ken I. Boodhoo, *Associate Professor and Chairperson*
Ralph S. Clem, *Associate Professor*
Thomas A. Breslin, *Assistant Professor*
Farrokh Jhabvala, *Assistant Professor*
Charles G. MacDonald, *Assistant Professor*
Terry L. McIntosh, *Assistant Professor*
Ivan C. Harnanan, *Visiting Assistant Professor*

LOCATION: Tamiami and North Miami Campuses

DEGREE: *Bachelor of Arts*
A grade of C or better in all courses required for the major is necessary for graduation.

LOWER DIVISION PREPARATION:
Recommended Courses: Economics, foreign languages, geography, history, international relations, introduction to statistics, political science, sociology.

UPPER DIVISION PROGRAM:
Major:

		Quarter Hours
Required Courses		15
GEA 3000	World Regional Geography	
INR 3003	Foundations of International Relations	
INR 4605	Approaches to International Relations	
Breadth Requirements:		
At least one course in each of the following:		20
Area studies (regional courses on Europe, the Caribbean, Latin America, Africa, Asia, or the Soviet Union)		
Population Studies or Geography		
International Law or Organization		
Issues and Problems in International Relations		

Other Requirements: Ten additional credits in international relations, of which 5 must be taken within the department and 5 may be in approved internationally related courses from other departments or schools (for example: political science; economics; sociology; business; hospitality management).	10
Electives: Courses designed to meet particular professional goals. The student is encouraged to consider a dual major in related fields; to pursue courses in foreign languages and methodology; and to work toward appropriate academic certificates (i.e., Caribbean Studies, Latin American Studies).	45
	90

Minor in International Relations: 25
A student majoring in another academic discipline will earn a minor in International Relations by successfully completing at least 25 hours of approved coursework in the Department of International Relations. This program must include:

1) Foundations of International Relations (INR 3003)
2) World Regional Geography (GEA 3000) or an approved course in Geography
3) A course in International Law or Organization
4) Two electives in International Relations

THE DUAL MAJOR: The student is encouraged to pursue a dual major within the 90 quarter hour upper division requirement: the balance of 45 quarter hours between the 90 required to graduate and the 45 required for the major in International Relations is almost always sufficient to satisfy the requirements of a second major. The dual major program allows a student to add an important international dimension (and certification) in other academic fields.

Course Descriptions

Definition of Prefixes
CPO—Comparative Politics; GEA—Geography—Regional (Area); HFT—Hospitality, Food, Tourism; INR—International Relations; POS—Political Science; PUP—Public Policy; SOC—Sociology.

(Continued)

International Relations

CPO 3326 Population and Geography of the Caribbean (5)
Introduction to the physical, cultural and political geography of the Caribbean. Emphasis on population patterns, problems of population growth, and ethnicity.

GEA 3000 World Regional Geography (5)
A systematic survey of the major regions and countries of the world. with regard to their physical, cultural, and political characteristics. Emphasis upon climate, natural resources, economic development, and population patterns.

GEA 3172 Geography of the Developing World (5)
Examines the geographical factors shaping the differences between more and less-developed countries, and prospects for narrowing these in the future. Stress is laid on the need to utilize efficiently the physical environment and the human barriers to such utilization.

GEA 3400 Population and Geography of Latin America (5)
Introduction to the physical, cultural, and political geography of Latin America. Emphasis on population patterns and problems of population growth, systems of land use and tenure, economic development, natural resources, and agriculture.

GEA 3554 Population and Geography of the Soviet Union (5)
An analysis of the U.S.S.R. in terms of its resources; economic development; and aspects of population change such as migration, urbanization, and nationality groups.

GEA 3600 Population and Geography of Africa (5)
Introduction to the physical, cultural, and political geography of Africa. Emphasis on the evolution of independent states, and economic development.

GEA 3630 Population and Geography of the Middle East (5)
Introduction to the physical, cultural, and political geography of the Middle East. Emphasis on population patterns, natural resources, and economic development.

GEA 3710 Population and Geography of China (5)
Introduction to the physical, social and cultural geography of China. Emphasis on population patterns, problems of population growth, regionalism.

GEA 5200 Topics in Social Geography (5)
Topics discussed include geographic aspects of population and ethnicity, with emphasis on sources and analysis of data and pertinent concepts. Prerequisite: GEA 3000 or permission of instructor.

HFT 3700 Tourism and International Affairs (5)
An introduction to basic elements of international tourism; an inquiry into the transnational influence of tourism as affected by its institutional organization, by the leisure traveler, and by the host national; and a review of opportunities for policy-making by the group, the State, and international and global agencies.

HFT 4700 Alternate Tourism Scenarios and Strategies (5)
A course for the student familiar with tourism in the context of international affairs; tourism as migratory aspect; tourism as international medium; tourism and the export of technology; tourism and national dependency; the marketing of globalism through tourism; others. The course includes strategies laboratory.

INR 3003 Foundations in International Relations (5)
An examination of international political, economic, and social systems. Emphasis is placed on basic approaches to the study of international relations.

INR 3004 Patterns of International Relations (5)
The course deals with the development and practice of key concepts of international relations as seen in the historical perspective of the 19th and 20th centuries. The course is structured so as to emphasize the continuity and coexistence of the several concepts during the 20th century, and to provide an outline of modern diplomatic history.

INR 3031 The Future of the International System (5)
Explores probable and improbable international futures through the use of simulations, gaming, and speculative literature. Focuses upon alternatives to present international arrangements.

INR 3043 Population and Society (5)
Introduction to basic demographic concepts: fertility, mortality, migration, urbanization. Discussion of economic development, modernization and population change. Examination of sources of data and background information including censuses and vital statistics, and their utilization.

INR 3081 Issues and Problems in International Relations (5)
Examines selected world and regional issues and problems Topics vary according to the instructor.

INR 3214 International Relations of Europe (5)
An examination of the international, social, economic, and political life of contemporary Europe. Emphasis given to international organizations and the trend toward economic and political integration.

INR 3224 International Relations of East Asia (5)
A survey of the patterns of international relations in the post-colonial perios in east and southeast Asia. Political, military and economic aspects examined.

INR 3226 International Relations of South Asia (5)
A study of South Asia as a regional international system with special emphasis on the period 1945 to the present. Interaction between the regional and world systems. Role of the super-powers.

INR 3231 International Relations of China (5)
An examination of the development of China's international relations in the 20th century. Special attention to the development of institutional mechanisms for diplomacy and to problems of integrating domestic and foreign policies.

INR 3245 International Relations of Latin America (5)
An examination of international, social, economic, and political life of Latin America. Emphasis given to the role of international organizations; regionalism; and the trend toward economic integration.

INR 3246 International Relations of the Caribbean (5)
An examination of the international social, economic, and political life of the Caribbean. Includes English, Spanish, and French speaking regions.

INR 3274 International Relations of the Middle East (5)
An examination of the international social, economic, and political life of the Middle East. The role of oil in the region will receive special attention.

(Continued)

International Relations

INR 3403 International Law (5)
Introduction to the legal concepts, framework and institutions which play a role in international relations theory and practice.

INR 3404 Principles of Public International Law (5)
A study of public international law principles in selected areas such as treaties; state succession; law of the sea; air and space law; law of international economic institutions' international conflict resolutions procedures.

INR 3502 International Organizations (5)
The study of international political, economic, and social organizations and their impact upon the relations between nations. Emphasis on the constitution, voting, membership, security and operation of such organizations, and the settling of international disputes through these bodies.

INR 3949 Cooperative Education in Social Sciences (5)
A student majoring in one of the Social Sciences (Economics, International Relations, Political Sciences, Sociology, or Psychology) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

INR 4024 Ethnicity and Nationality: World Patterns and Problems (5)
A systematic survey of multi-national states and their current political and socioeconomic situations. The concept of ethnicity and its correlates. Conceptual bases of ethnic integration, assimilation, and stratification. The macro and micro-scales: country, region, city, neighborhood. The consequences of modernization and economic development.

INR 4033 International Communication (5)
The course will explore language as the medium of national and international communication; the multiple and often conflicting roles of language as unifier and isolator of political and social entities.

INR 4044 World Population Problems (5)
Analysis of problems of population growth, economic development, and food supply. The impact of population growth upon the world political system. The Green Revolution and its implications. Environmental consequences of population growth. Prerequisite: INR 3043.

INR 4054 World Resources and World Order (5)
An examination of the impact of the quantity and distribution of the world's resources upon the relations between nations. The availability of mineral resources and food, in particular, will receive attention; and an assessment will be made of the international economic and political implications deriving therefrom.

INR 4245 Caribbean Regional Relations (5)
An examination of the forces and institutions which contribute to or inhibit cooperation and integration in the Caribbean. Prerequisites: INR 3246, CPO 3323, ECS 4432, or ECS 4433.

INR 4261 Science, Technology and International Relations (5)
A study of the importance and relevance of science and technology to our understanding of international relations. Emphasis will be placed on national scientific policies of major countries, their implication on the international community and the major national and international agencies, organizations, treaties, and programs.

INR 4283 International Relations, Development, and the Third World (5)
An examination of the impact of the theory and practice of development and the relations between nations, with particular emphasis on the Third World. Attention given to the role of international political and economic organizations in the development process.

INR 4404 International Protection of Human Rights (5)
Development of the concern of the international community with the rights of individuals and groups and the institutional mechanisms which have been set up for their protection.

INR 4408 Topics in International Law (5)
An intensive examination of selected topics in international law and relations among nations. Topics will vary according to the interests of the instructor and the students.

INR 4417 International Relations and International Law (5)
World order and international relations. Current trends in the theory and practice of international law. Progressive development of international law through international institutions, in such matters as intervention, use of force, human rights, and the law of the sea.

INR 4605 Approaches to International Relations (5)
Analysis and conceptualization of the forces and conditions which influence relations among nations. Emphasis is on the provision of an analytical basis for the study of international relations. Prerequisite: INR 3003 or permission of instructor.

INR 4905 Independent Study (VAR)

INR 4931 Topics in International Relations (5)
Varies according to the instructor.

INR 4949 Cooperative Education in Social Sciences (5)
A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

INR 5906 Independent Study (VAR)

INR 5935 Topics in International Relations (5)
Varies according to the instructor.

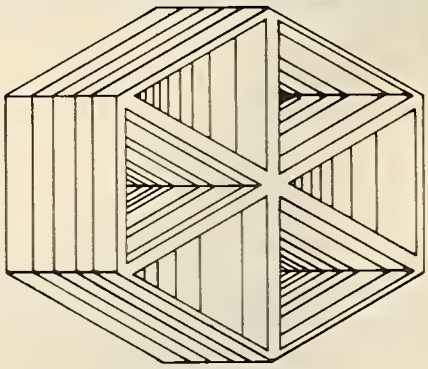
INR 6605 Contemporary International System (5)
Study of International Relations theory supplemented with a consideration of legal institutional and developmental issues. Prerequisite for MIB students: INR 6603 (World Politics)

POS 4692 Law and the Process of Change (5)
An exploration of the role of law and legal institutions in the process of modernization, with particular emphasis on developing countries.

PUP 3206 International Law and the Environment (5)
Introduction to the growing body of international laws on environmental issues, with special emphasis on important cases. Recent attempts to coordinate and regulate activities affecting the global environment, with particular attention to the U.N. Environmental Agency.

(Continued)

Liberal Studies



Liberal Studies Major

Martin L. Tracey, *Director of Liberal Studies and Associate Professor of Biological Sciences*

The purpose of the Liberal Studies Program is to expose the student to the broadest possible range of courses offered in the College, while at the same time granting the opportunity to pursue an individualized program of studies under the Liberal Studies guidelines. These guidelines include six categories of courses: (1) Foundations of Liberal Studies, two courses (of five hours each), to be taken by Liberal Studies students as early in their work as possible; (2) Interdisciplinary Colloquia, two courses (of five hours each) involving faculty from several departments of the College and dealing with topics which cut across disciplinary lines; (3) Scientific Analysis, two courses (of five hours each) which expose the student to the scientific method and its application to problems in biology, physics, chemistry, earth science, experimental psychology, and environmental science; (4) Humanistic Analysis, two courses (of five hours each) which deal with the analysis of literary and historical texts or works of art and music; (5) Social Analysis, two courses (of five hours each) which expose the student to the basic theories and methods of social scientists in the fields of political science, economics, social psychology, sociology, anthropology, and social-science-oriented history; (6) Artistic Creation, one five-hour course in studio art or music, creative writing, or theater, which allows the student to experiment with her or his own creativity and to experience the work of the artist.

Students are free to choose any combination of courses within these guidelines. Under the advisement of the Director of Liberal Studies, the student will be encouraged to pursue an individualized and focused program.

A grade of "C" or better in all courses required for the major is necessary for graduation.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: none.

Recommended Courses: Arts and Sciences concentration recommended.

UPPER DIVISION PROGRAM:

	Quarter Hours
Major:	
Required courses:	55
Courses offered by any of the units of the College of Arts and Sciences, chosen in accordance with academic guidelines of the Program of Liberal Studies, to meet requirements in the four following areas:	
Scientific Analysis	10
Humanistic Analysis	10
Social Analysis	10
Artistic Creation	5
Interdisciplinary Colloquia offered by the Liberal Studies Program	10
Foundations of Liberal Studies	10
Electives:	35

Limitations: If the student wishes to obtain a second major concurrently, no more than fifteen credit hours taken to meet the requirements of the other major may be counted towards the requirements of Liberal Studies. If she/he wishes to obtain a minor concurrently, no more than ten credit hours taken to meet the requirements of the minor may be counted towards the requirements of Liberal Studies. Additionally, no student is allowed to take more than 30 hours in one discipline.

Course Descriptions

Definition of Prefixes
IDS–Interdisciplinary Studies

IDS 3930 Foundations of Liberal Studies (5)
This will be a broad synthesis of knowledge and methods in the Arts and Sciences, taught from the perspective of different disciplines. Specific topics will be announced in advance.

IDS 3949 Cooperative Education in Liberal Studies (5)
A student majoring in Liberal Studies may spend several quarters fully employed in industry in a capacity relating to the major.

IDS 4905 Independent Study (VAR)
Cross-disciplinary topics for individual study and research to be chosen by External Degree students in consultation with their faculty advisors.

IDS 4920 Liberal Studies Colloquia (5)
Individual sections will study, from an interdisciplinary perspective, issues selected and presented jointly by college faculty. Specific topics will be announced in advance.

IDS 4949 Cooperative Education in Liberal Studies (5)
A student majoring in Liberal Studies may spend several quarters fully employed in industry in a capacity relating to the major.

Mathematical Sciences

Samuel S. Shapiro, *Professor and Chairperson*
Robert C. Fisher, *Professor*
Malcolm H. Gotterer, *Professor*
Toby S. Berk, *Associate Professor*
John C. Comfort, *Associate Professor*
Gauri L. Ghai, *Associate Professor*
William T. Kraynek, *Associate Professor*
Richard L. Rubin, *Associate Professor*
Anthony C. Shershin, *Associate Professor*
James F. Slifker, *Associate Professor*
Willie E. Williams, *Associate Professor*
Carlos W. Brain, *Assistant Professor*
Paulette Johnson, *Assistant Professor*
Arie Kaufman, *Assistant Professor*
Geoffrey E. McKenty, *Assistant Professor*
Jainendra K. Navlakha, *Assistant Professor*
Ralph P. Romanelli, *Assistant Professor*
Thomas A. Whitehurst, *Assistant Professor*
Domitila Fox, *Instructor*
Carol D. Henley, *Instructor*
Ina Parks Howell, *Instructor*
Orlando Sauleda, *Instructor*
Michael C. Stinson, *Instructor*
Matrid H. Whidden, *Instructor*

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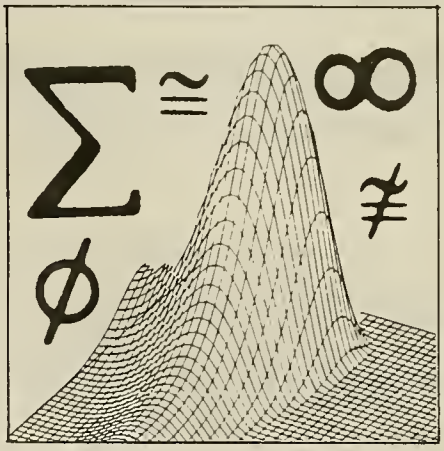
Mathematical Sciences
Statistics



LOCATION: Tamiami Campus Only
DEGREE: *Bachelor of Science*
LOWER DIVISION PREPARATION:
Required Courses: Calculus including multivariable calculus; introductory course in computer programming; linear algebra; differential equations.

Remarks: If an entering mathematics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are: MAC 3411–MAC 3412–MAC 3413 (Calculus); COP 3112 (Programming); MAS 3103 (Linear Algebra); and MAP 3302 (Differential Equations).
UPPER DIVISION PROGRAM:
Major:

	Quarter Hours
Required Courses:	45
MAS 4301 Algebraic Structures	5
MAA 4211–MAA 4212 Advanced Calculus	10
At least one of the following two term sequences:	
STA 3321–STA 3322 Introduction to Mathematical Statistics	10
MAP 4401–MAP 4402 Mathematical Methods in the Physical Sciences	10
MAP 3103–MAP 3104 Mathematical Models and Applications	10
MAS 4301–MAS 4302 Algebraic Structures	10
STA 5446–STA 5447 Probability Theory	10
Additional Mathematical Sciences courses	20 or 25
Electives:	45
	90

Remarks: (1) If STA 3321–STA 3322 is not completed, STA 3163 must be taken as a non-major elective. (2) The student *must* consult his or her advisor at the University to determine which Mathematical Science courses, in addition to required courses specified above, satisfy the requirements for a mathematics major. (3) The student whose interests are more directly in statistics or computer science should consult those programs of study below.
Minor in Mathematics

	Quarter Hours
Required Courses:	35
MAC 3411, MAC 3412, MAS 3413 Calculus I, II, III (unless previously taken)	15
Mathematics courses approved for the Mathematics Major program	20
	35

Remarks: No mathematical sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a mathematical sciences course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.
A grade of "C" or better in all courses required for the major is necessary for graduation.

Statistics

LOCATION: Tamiami Campus Only
DEGREE: *Bachelor of Science*
LOWER DIVISION PREPARATION:
Required Courses: Calculus including multivariable calculus; introductory course in computer programming and linear algebra.

Remarks: If an entering statistics major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are: MAC 3411, MAC 3412, MAC 3413 (Calculus); COP 3112 (Programming); MAS 3103 (Linear Algebra).
UPPER DIVISION PROGRAM:
Major:

	Quarter Hours
Required Courses:	45
STA 3321 Introduction to Mathematical Statistics I	5
STA 3322 Introduction to Mathematical Statistics II	5
STA 3163 Statistical Methods I	5
STA 3164 Statistical Methods II	5
Additional Mathematical Sciences courses with at least 15 hours in statistical courses	25
Electives:	45
	90

Remarks: Statistics courses are listed under mathematical sciences. The student must consult his or her advisor at the University to determine which courses, in addition to the required courses listed above, satisfy the requirements for a statistics major.

Minor in Statistics

	Quarter Hours
Required Courses:	20
STA 3321 & STA 3322 Introduction to Mathematical Statistics I and II	10
STA 3163 & STA 3164 Statistical Methods I and II	10
	20

Remarks: No Mathematical Sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a Mathematical Sciences course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.

A grade of "C" or better in all courses required for the major is necessary for graduation.

Computer Science

LOCATION: Tamiami and North Miami Campuses
DEGREE: *Bachelor of Science*
LOWER DIVISION PREPARATION:
As part of the 90 quarter hours (60 semester hours) of lower division coursework necessary to enter this upper division major, note the following recommendations and/or course requirements:

Required Courses: Computer Programming in assembly language, COBOL, and in some other high level language.
Students entering without having met this lower division requirement (and without an equivalent background) are required to take some or all of the following courses as non-major electives:

Introduction to Computer Programming: COP 3112
Assembly Language Programming: COP 3402
COBOL and Data Processing: COP 3122

Recommended Courses: College Algebra
Student who have not taken College Algebra should elect MAC 3132 (Pre-calculus Mathematics) as their first mathematics course at FIU.

(Continued)

Mathematical Sciences
Computer Science

UPPER DIVISION PROGRAM:
Major:

		Quarter Hours
Required Courses:		
MAC 3233	A Short Course in Calculus *or*	5
MAC 3411 & MAC 3412	Calculus I & II	10
STA 3161	Introduction to Statistical Analysis *or*	5
STA 3163	Statistical Methods I	5
MAD 3104	Discrete Mathematics	5
COP 3522	Programming Methodology	5
COP 3530	Data Structures	5
CDA 4101	Structured Computer Organization	5
COP 4610	Operating Systems Principles	5

Plus one course from each of the following two lists:

List (1)		
MAD 3305	Graph Theory	
MAD 3401	Numerical Analysis	
MHF 4302	Mathematical Logic	
COT 4320	Theory of Computations	
List (2)		
CDA 3040	Computer Hardware Fundamentals	
CDA 4163	Data Communications	
CDA 4171	Minicomputer Architecture and Applications	
CAP 4721	Computer Graphics	
COP 5540	Data Base and File Organization	
COP 5640	Programming Systems	
Electives:		45
		90

Remarks: The student must consult his advisor at FIU concerning those Mathematical Sciences courses which can be used to satisfy the requirements for a Computer Science Major.

Minor:

		Quarter Hours
Required Courses:		25
COP 3112;* COP 3402;*	Introduction to Computers I & II	10
COP 3522 and	Programming Methodology	5
COP 3122	Data Processing & COBOL	5
Elective:	One other course in Computer Science at the 3000 or 4000 level acceptable for the major program	5
		25

*This course may be replaced by equivalent lower division course work. However, a minimum of 20 quarter hours must be taken in computer science at the University, and must be selected from those courses approved for the computer science major program.

Remarks: No Mathematical Sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a Mathematical Sciences course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.
A grade of "C" or better in all courses required for the major is necessary for graduation.

Mathematical Sciences

LOCATION: Tamiami Campus Only
DEGREE: *Bachelor of Science*
LOWER DIVISION PREPARATION:
Required Courses: Calculus including mutivariable calculus; introductory courses in computer programming and assembly language; linear algebra; differential equations.
Remarks: If an entering major student has not met a lower division requirement, the equivalent course must be taken at the University, and will be counted as a non-major elective. The equivalent courses are MAC 3411, MAC 3412, MAC 3413 (calculus); COP 3112, COP 3402 (introductory programming and assembly language); MAS 3103 (Linear Algebra); and MAP 3302 (Differential Equations).
UPPER DIVISION PROGRAM:
Major:

		Quarter Hours
Required Courses:		45
STA 3163–STA 3164	Statistical Methods I and II	10
MAP 3103–MAP 3104	Mathematical Models and Applications	10
MAD 3401	Numerical Analysis	5
MAD 3104	Discrete Mathematics	5
COP 3530	Data Structures	5
MAP 4401–MAP 4402	Mathematical Methods in Physical Sciences	10
	or	
MAA 4211–MAA 4212	Advanced Calculus	10
Electives:		45
		90

Minor in Mathematical Sciences

Required Courses:		35
MAC 3411, MAC 3412, MAC 3413	Calculus I, II, & III (Unless taken previously); and 20 credit hours of Mathematical Sciences Courses that have been approved for the Mathematics Major program	15 20
		35

Remarks: No Mathematical Sciences courses can be applied to more than one minor, nor can courses used to satisfy major requirements be used towards minor requirements. In the case where a Mathematical Science course is required for a major in one area and a minor in another, the student should see his or her advisor for an appropriate substitution for the requirement of the minor.
A grade of "C" or better in all courses required for the major is necessary for graduation.

Mathematical Sciences

LOCATION: Tamiami Campus Only
DEGREE: *Master of Science in Mathematical Sciences*
The Master's program in Mathematical Sciences consists of a total of 45 quarter hours of coursework. All students will be required to take the following:

		Quarter Hours
MAP 5117	Mathematical and Statistical Modeling	5
COP 5540	Data Base and File Organization	5
STA 5206	Design of Experiments	5
STA 5606	Mathematical Techniques of Operations Research	5
MAP 6127	Simulation and Modeling	5
		25

An additional 15 hours must be chosen from approved courses in at least two of the three areas of Computer Science, Mathematics and Statistics. For the final 5 hours, the student will be required to apply the techniques developed in his or her program of studies to the solution of a practical problem. The 40 hours of coursework must be completed with a "B" average or higher and a grade of "C" or higher in each course. A grade of credit (CR) is required for the research project.

(Continued)

Mathematical Sciences

Prerequisites for the program consist of the following FIU courses (or their equivalents):

COP 3112 Introduction to Computers I (Fortran)
COP 3402 Introduction to Computers II (Assembly Language)
COP 3530 Data Structures
MAC 3411 & MAC 3412 & MAC 3413 Calculus and Multivariable Calculus
MAS 3103 Linear Algebra
STA 3321 & STA 3322 Mathematical Statistics; or
STA 3163 & STA 3164 Statistical Methods I and II

In addition to these prerequisites a student must hold a Bachelor's degree from an accredited university or college; must have received a "B" average or better in all coursework taken as an upper division student for the Bachelor's degree, and achieved a combined score of 1000 or higher on the Graduate Record Exam (including at least 650 on the quantitative portion); and must have approval of the departmental Graduate Committee.

Course Descriptions

Definition of Prefixes

CAP–Computer Applications; CDA–Computer Design/Architecture; CIS–Computer Information Systems; COC–Computer Concepts; COP–Computer Programming; COT–Computing Theory; HES–Applied Health; MAA–Mathematics, Analysis; MAC–Mathematics, Calculus and Pre-Calculus; MAD–Mathematics, Discrete; MAE–Mathematics Education; MAP–Mathematics, Applied; MAS–Mathematics, Algebraic Structures; MAT–Mathematics, General; MGF–Mathematics, General and Finite; MHF–Mathematics, History & Foundations; MTG–Mathematics, Topology and Geometry; STA–Statistics.

CAP 4721 Computer Graphics (5)(F–S)
The principles and techniques of interactive computer graphics. Characteristics of graphical devices; representation and manipulation of graphical data, light pens, and other graphical input devices; data structures for interactive graphics; graphical languages; applications of computer graphics. Prerequisites: MAC 3233, COP 3530 and CDA 4101.

CDA 3040/ETE 3650 Computer Hardware Fundamentals (5)(W–SS)
This course concentrates on two major areas. The first considers computer number systems, logic gates and Boolean algebra. The second treats the arithmetic element, computer memories, input-output, and computer organization. Emphasis is placed on the latter topics. Prerequisite: MAD 3104.

CDA 4101 Structured Computer Organization (5)(F–W–S)
This course investigates the analysis of the levels of organization of computer systems, including the conventional, microprogramming and operating systems levels. A number of major computer systems are analyzed. Prerequisite: COP 3402, or equivalent.

CDA 4163 Data Communications (5)(F)
Study of communications-based systems, common carrier facilities, tariffs, and related equipment. Analysis and design of communications networks utilizing various techniques. Uses of communications for data collection, remote computing, message switching. Prerequisite: CDA 4101.

CDA 4171 Minicomputer Architecture and Applications (5)(W–SS)
An introduction to minicomputers, in which students will have direct access to a general purpose minicomputer system. Study of the architecture of a particular minicomputer (including hands-on experience) followed by a comparison study of other minicomputer systems. Selected minicomputer applications in business, industry and science. Prerequisites: CDA 4101.

CIS 3905 Independent Study (VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

CIS 3932 Special Topics (VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 4905 Independent Study (VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

CIA 4932 Special Topics (VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

CIS 5908 Independent Study (VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

CIS 5934 Special Topics (VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

COC 3300 Introduction to Computers and Computer Applications (5)(W–SS)
A survey of computers and their applications: hardware, software, computer systems operation, advanced computer systems, acquiring and using computer power, systems analysis, computer impact on society. Not acceptable for credit to mathematical science majors (mathematics, computer science, statistics).

COC 3400 Computers and Society (5)(S)
A course for the citizen who is interested in the effects of computers upon our society. The major focus will be upon social, political and ethical considerations: what computers are and how they work; applications, such as data banks, government uses, simulation; considerations such as privacy and the police state, the cashless society, computers and business, computers and the quality of life, systems analysis and the planned society. The course is oriented toward the non-scientist and requires no background in mathematics, computer science, or social science. As part of the course, students will learn to write and run a simple computer program.

COP 3112 Introduction to Computers I (5)(F–W–S–SS)
A course in the fundamentals of digital computer programming. The concept of an algorithm; flow charting; programming; testing and debugging. Numerical and non-numerical techniques. The syntax and semantics of FORTRAN IV.

COP 3120 Introduction to COBOL Programming (5)(F–W–S)
Introduction to the basic notions of computer programming, with emphasis on data process applications. The syntax and semantics of basic COBOL are examined. Concepts in file organization and techniques for processing are introduced. Not acceptable for credit to computer science majors.

COP 3122 Data Processing and COBOL (5)(F–S)
A second course in programming, oriented toward data processing applications. Various techniques for organizing and processing files: sequential random-access, indexed and inverted files. File sorting and maintenance. Program documentation. Instruction in the COBOL programming language. Applications of computers and data processing in business. Prerequisite: COP 3170 or COP 3112.

COP 3170 Introduction to Computer Programming (3)(F–W–S–SS)
An introduction to the BASIC computer language and to the use of the interactive and batch facilities of the computer. Not acceptable for credit to computer science majors.

(Continued)

Mathematical Sciences

COP 3172 Basic Programming for Business (5)(F–W–S–SS)
Introduction to the BASIC computer language with emphasis on business data processing applications. Using the interactive and batch facilities of the machine, concepts on file organization and techniques for processing are examined. Prerequisites: None. Not acceptable for credit to computer science majors.

COP 3402 Introduction to Computers II (5)(F–W–S–SS)
Principles and techniques of digital computers, with emphasis on machine language and assembly language programming. Internal representation of numeric and non-numeric information; registers, indexing and computer structure; arithmetic, logical and input-output instructions; fixed and floating arithmetic. Prerequisite: COP 3112 or equivalent.

COP 3404 Computer Assembly Language (2)(F–S)
Assembly language for the UNIVAC 1100 series; instruction set, register usage, internal data representation, assembler pseudo-operations, PROC's. Basic elements of EXEC-8. Prerequisites: Course in assembly language for a computer other than UNIVAC 1106; demonstration of adequate knowledge of assembly language for a computer other than UNIVAC 1108.

COP 3522 Programming Methodology (5)(F–S)
This course covers BNF, structuring of programs, program documentation, debugging and testing, top down design, and a project for practical experience in these techniques. Programming in a high level language. Prerequisite: COP 3402 or equivalent.

COP 3530 Data Structures (5)(W–S–SS)
Basic concepts of data organization and associated techniques. Arrays, stacks, singly and multiply linked lists, binary and n-ary trees, graphs. Both internal and external storage structures. Accessing, searching and sorting. Recursive and non-recursive processing. Dynamic allocation and garbage collection. Prerequisite: MAD 3104 and COP 3522.

COP 4610 Operating Systems Principles (5)(W–S–SS)
A study of the basic principles of modern multi-programming and time-sharing systems. Interrupts and data channels, multiprocessor system, memory management, virtual memory, segmentation, process communication, deadlock and interlock handling. Prerequisites COP 3530 and CDA 4101.

COP 5540 Data Base and File Organization (5)(W–S)
This course deals with the need for formal data organization; system requirements; effects of storage; devices; file attributes; file organization; search strategies; privacy and security. Prerequisites: COP 3530 and CDA 4101.

COP 5640 Programming Systems (5)(S or SS)
Assemblers; loaders; MACRO systems; basic techniques of compilation; self-compilers; syntax encoding and recognition; code generation and optimization. Prerequisites: COP 3522, MAD 3104 and COP 3530.

COP 6555 Survey of Programming Languages (5)(F)
This course consists of a comparative study of programming languages including LISP (or SNOBOL-4), PASCAL, APL, PL/1 (or ALGOL-60) and ALGOL-68. Emphasis is given to different data structures available, prominent features of the language and their applications. Some criteria to compare different languages are discussed and a few languages are compared as examples. Prerequisites: COP 3522 and COP 3530.

COT 4320 Theory of Computations (5)(S)
An introduction to abstract machine theory, combinatorial systems, and computable functions. Topics include: finite-state machines, regular sets, Turing machines, the halting problem, phrase-structure grammars and languages, and Post's correspondence problem. Emphasis is on surveying basic topics and developing an intuitive understanding of the theory of computation. Prerequisite: MAD 3104.

HCA 4711/STA 4161 Statistical Applications in Health Care (5)(W)
A course in descriptive and inferential statistics for the Health Services. Topics include probability distributions, point and interval estimation, hypothesis testing, regression and correlation and contingency table analysis. Prerequisite: STA 3013 or equivalent college mathematics course.

HCA 5711/STA 5127 Statistical Methods for Health Services (3)(F)
This course presents tools for the analysis of data that arise in the health professions. Specific topics include: probability concepts, poisson distribution, nonparametric techniques, sample size determination, analysis of variance and advanced regression techniques. Students will be taught the use of a computerized statistical analysis package. Prerequisite: HCA 4711 or introductory upper division college statistics course.

MAA 4211–MAA 4212 Advanced Calculus I & II (5–5)(W–S)
An intensive study of the basic ideas of calculus. Topics may include: the real number system, continuity, differentiation, Riemann-Stieltjes integration, infinite series, series of functions, Fourier series, functions of several variables. Prerequisites: MAC 3413 and MAS 3103.

MAA 4402 Complex Variables (5)(SS)
An introduction to complex variables, beginning with the algebra and geometry of the complex number system. Topics include: complex functions; analytic functions; Cauchy's theorem and its consequences; Taylor and Laurent series; residue calculus; evaluation of real integrals and summation of series; conformal mapping. Prerequisite: MAC 3413, and MAP 3302 or MAA 4211.

MAC 3132 Pre-calculus Mathematics (5)(F–W–S–SS)
Topics to be covered include: functions, exponential and logarithmic functions, trigonometry and the basics of analytic geometry. Prerequisites: Two years of high school algebra.

MAC 3233 A Short Course in Calculus (5)(F–S)
A one quarter introduction to the basic notions of calculus. Specific topics include: Differential calculus using polynomial, exponential and logarithmic functions, and its application to optimization; integral calculus with area and probability applications. Prerequisites: MAC 3132 or working knowledge of algebra.

MAC 3411–MAC 3412 Calculus I & II (5–5)(F–W–S–SS)
An introduction to basic concepts, computations, and applications in calculus. The first course deals with basic concepts, techniques and applications of the derivative, and an introduction to the integral. The second course deals with integration techniques and applications of the integral, an introduction to multivariable calculus, infinite series, and Taylor series. Prerequisite: Trigonometry or MAC 3132.

MAC 3413 Multivariable Calculus (5)(F–W–S)
This course deals with the differential and integral calculus of real valued multivariable functions. The topics include: directional and partial derivatives, gradients, and their applications; differential calculus of vector valued functions; multiple, iterated, line, and surface integrals. Prerequisite: MAC 3412 (or equivalent).

(Continued)

Mathematical Sciences

MAD 3104 Discrete Mathematics (5)(F–W–S)
An introduction to abstract mathematical structures, with special emphasis on theories and methods which are relevant to the study of computer science. Topics include: introduction to formal systems and techniques of proof; combinatorial vs. relational structures; groups and graphs; Boolean algebras; abstract languages and machines. Prerequisite: COP 3112.

MAD 3305 Graph Theory (5)(W–SS)
An introduction to the study of graphs. Topics include the following: paths and circuits, connectedness, trees, shortest paths, networks, planar graphs, the coloring of graphs and directed graphs. Applications of graphs to computer science will be discussed. Prerequisite: COP 3112.

MAD 3401 Numerical Analysis (5)(W–SS)
Basic ideas and techniques of numerical analysis. Topics include: finite differences, interpolation, solution of equations, numerical integration and differentiation, applications, introduction to applied linear algebra. This course will make extensive laboratory use of the computer facility. Prerequisites: COP 3170, or COP 3112 and MAC 3412, or MAC 3233.

MAE 4810–MAE 4811 Foundations of Mathematics I & II (5–5)(F–W)
An integrated course designed for teachers of elementary and early junior high students. Emphasis will be placed on inductive and rudimentary deductive approaches to number systems, algebra, geometry, probability, statistics, and mathematical systems. The relationship between these fields and their applications will be stressed. Intuitive aspects of synthetic, analytic and transformation geometry will serve to relate geometry, algebra and mathematical systems. Prerequisite: None.

MAP 3103–MAP 3104 Mathematical Models and Applications I & II (5–5)(W–S)
A course to provide an understanding of the use of mathematical models in the description of the real world. In addition to considering basic principles in philosophy of formal model building, specific models will be considered, such as Markov Chain models, models for linear optimization, models involving stochastic processes, graphs and models, models for growth processes, and ecological models. Evaluation of models will also be discussed. Prerequisites: MAS 3103 and MAC 3413, or MAP 3302.

MAP 3302 Differential Equations (5)(F–S)
An introduction to differential equations and their applications, based upon a knowledge of the calculus. Topics to include: initial value problems of the first order, numerical solutions, systems of differential equations, linear differential equations, Laplace transforms, series solutions. Prerequisite: MAC 3412.

MAP 4401–MAP 4402 Mathematical Methods in Physical Sciences I & II (5–5)(S–SS)
A study of those topics in mathematics most often applied in the physical sciences. A prerequisite knowledge of ordinary differential equations is required. Topics to be discussed include the following: solutions to ordinary differential equations about singular points; Fourier Analysis; Sturm-Liouville Problems; Bessel Functions; Legendre Polynomials; boundary value problems; Laplace equations; applications to problems in the physical sciences. Prerequisite: MAP 3302.

MAP 5117 Mathematical and Statistical Modeling (5)(F)
Topics to be covered include: regression models, forecasting and time series models, probability and various statistical models. Computer solutions of these models will be included. Prerequisites: MAC 3413, COP 3402, MAS 3103; and STA 3322 or STA 3164.

MAP 6127 Simulation and Modeling (5)(S)
Two areas are covered in this course: advanced queueing models and simulation techniques. The relationships between these two areas, applications, and simulation languages will be among the topics covered. Prerequisite: STA 5606.

MAS 3103 Linear Algebra (5)(F–S)
An introduction to the topics in linear algebra most often used in applications. Topics include: matrices and their applications; simultaneous linear equations and elementary operations; linear dependence; vector spaces; rank and inverses; inner products and "best" approximations; numerical solutions of simultaneous linear equations; eigenvalues and eigenvectors; iterative methods for calculating eigenvalues; and systems of linear equations. Prerequisite: MAC 3412.

MAS 4301–MAS 4302 Algebraic Structures I & II (5–5)(F–W)
A course of study of abstract mathematical structures of modern algebra. The major emphasis in the first term is placed on the concept of a group. In the second term, rings and fields are studied, with applications to polynomials, number theory, geometry, and solvability of equations. Prerequisite: MAS 3103.

MAS 5215 Number Theory (5)(SS)
Topics to be discussed are selected from the following: congruences, Diophantine equations, distribution of primes, primitive roots, quadratic reciprocity and classical theorems of number theory.

MAT 3905 Independent Study (VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

MAT 3930 Special Topics (VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

MAT 3949 Cooperative Education in Mathematical Sciences (VAR)(F–W–S–SS)
One quarter of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student.

MAT 4905 Independent Study (VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

MAT 4930 Special Topics (VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

MAT 4943 Mathematical Sciences Internship (VAR)(F–W–S–SS)
A special program to encourage students to get guided on-the-job experience in computer sciences, statistics, or mathematics in an industrial enterprise, governmental agency or other organization. Requirements: minimum grade of B or higher in all courses in the major area, and approval by Departmental Internship Committee. Application is required at least one term in advance of registration for this course.

MAT 4949 Cooperative Education in Mathematical Sciences (VAR)(F–W–S–SS)
One quarter of full-time supervised work in an outside organization taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student.

(Continued)

Mathematical Sciences

MAT 5907 Independent Study
(VAR)(F–W–S–SS)
Individual conferences, assigned reading, and reports on independent investigations.

MGF 3113 The Significance of Mathematics
(5)(W)
A course for non-science majors, directed toward students with little or no assumed background in mathematics. The objective is to convince the student that mathematics is fun, interesting and useful. Topics may include: logical reasoning, unsolved problems of arithmetic, probability and statistics, geometry, topology, computers, and History of Mathematics.

MHF 4302 Mathematical Logic (5)(W)
A study of formal logical systems and their applications to the foundations of mathematics. Topics to be selected from the following: definition of mathematical proofs; set theory; analysis formalized with the predicate calculus; theorems of Godel and Church; recursive function theory; and idealized computers.

MTG 3212 Geometry (5)(W)
A study of the basic structure of Euclidean geometry together with topics from advanced Euclidean geometry and non-Euclidean geometry. Prerequisite: High School geometry.

MTG 4302 Topology (5)(F)
An introductory course in topology requiring a prerequisite knowledge of the calculus. Topics to be discussed will be selected from the following: topological spaces, metric spaces, continuity, completeness, compactness, separation axioms, products spaces, subspaces, convergence, and homotopy theory. Prerequisite: MAC 3413 and MAS 3103.

STA 3013 Statistics for Social Services
(5)(F–W–S–SS)
This is an elementary course in statistics, covering graphical and numerical condensation of data as well as the most basic parametric and non-parametric methods. Emphasis is placed on the interpretation of statistical results, rather than on ways to analyze experimental data.

STA 3122–STA 3123 Introduction to Statistics I & II
(5–3)(F–W–S–SS)
A course in descriptive and inferential statistics. Topics include: empirical and theoretical probability distributions; point and interval estimation; hypothesis testing; analysis of variance, regression, correlation, and basic non-parametric tests.

STA 3132 Business Statistics
(5)(F–W–S–SS)
Starting with an introduction to probability, the course provides an introduction to statistical techniques used in management science. It includes descriptive statistics, probability distributions, estimation and testing of hypothesis.

STA 3161 Introduction to Statistical Analysis
(5)(W–SS)
A course in descriptive and inferential statistics. Topics include: probability distributions, point and interval estimation, hypothesis testing, regression and correlation, goodness of fit tests, contingency tables and analysis of variance. Prerequisite: A course in College algebra.

STA 3163–STA 3164 Statistical Methods I & II (5–5)(F–W)
This course presents tools for the analysis of data. Specific topics include: use of normal distribution, tests of means, variances and proportions; the analysis of variance and covariance (including contrasts and components of variance models), regression, correlation, sequential analysis and non-parameteric analysis. Prerequisites: College algebra or first course in statistics.

STA 3182 Statistical Models (5)(S)
This is a specialized course in the use of statistical models to represent physical and social phenomena. The emphasis is on providing tools which will allow a researcher or analyst to gain some insight into phenomena being studied. An introductory knowledge of probability theory and random variables is assumed. Specific topics include: introduction to discrete and continuous probability distributions, transformation of variables, approximation of data by empirical distributions, central limit theorem, propagation of moments, Monte Carlo simulation, probability plotting, testing distributional assumptions. Prerequisites: MAC 3413, and first course in statistics.

STA 3321–STA 3322 Introduction to Mathematical Statistics I & II
(5–5)(W–S)
This course presents an introduction to the mathematics underlying the concepts of statistical analysis. It is based on a solid grounding in probability theory, and requires a knowledge of single and multivariable calculus. Specific topics include the following: basic probability concepts, random variables, probability densities, expectations, moment generating functions, sampling distributions, decision theory, estimation, hypothesis testing (parametric and non-parametric), regression, analysis of variance, and design of experiments. Prerequisite: MAC 3413.

STA 3905 Independent Study
(VAR)(F–W–S–SS)
Individual conferences, assigned readings, and reports on independent investigations.

STA 3930 Special Topics
(VAR)(F–W–S–SS)
A course designed to give groups of students an opportunity to pursue special studies not otherwise offered.

STA 4502 Practical Nonparametric Statistics (5)(W or S)
This course deals primarily with tests of hypotheses for situations where standard parametric procedures (t-test, F-test, etc.) cannot be applied. Topics include binomial, multinomial and Poisson tests, permutation test, sign test, Mann-Whitney U test, Wilcoxon signed rank test, rank correlation, contingency chisquare, Kruskal-Wallis one-way ANOVA by ranks, Friedman test and other non parametric tests. Prerequisite: First course in statistics.

STA 4603–STA 4604 Mathematical Techniques of Operations Research I & II (5–5)(S,SS)
An introduction to those topics in mathematics associated with studies in operations research. Topics include the following: linear programming and related topics, dynamic programming, queuing theory, computer simulation, network analysis, inventory theory, decision theory, integer programming. Prerequisites: MAS 3103 and STA 3161 or STA 3322.

STA 4664 Statistical Quality Control (5)(SS)
This course presents the simple but powerful statistical techniques employed by industry to improve product quality and to reduce the cost of scrap. The course includes the use and construction of control charts (Means, percentages, number defectives, ranges) and acceptance sampling plans (single and double). Standard sampling techniques such as MIL STD plans will be reviewed.

STA 4905 Independent Study
(VAR)(F,W,S,SS)
Individual conferences, assigned readings, and reports on independent investigations.

STA 5126/PSY 5206 Design of Experiments in Psychological Research (4)(F)
The following topics will be included as they relate to psychological research: A review of analysis of variance in randomized and blocked designs, pairwise and multiple comparison tests, and analysis of variance in factorial, nested, and split-plot experiments and analysis of covariance. Computer software packages will be used for some analyses. Prerequisites: STA 3122 and STA 3123 or equivalent.

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Modern Languages

STA 5206 Design of Experiments (5)(F)
This is an applied course dealing with the design and analysis of experiments employed in scientific and industrial research. A knowledge of the basic fundamentals of hypothesis testing and analysis of variance is assumed. Topics include: multiple comparison tests, completely randomized design, randomized blocks, Latin Square and related designs, nested and factorial experiments. Prerequisite: STA 3322, or STA 3164.

STA 5207 Topics in Design of Experiments (5)(W,S)
This applied course in design of experiments covers topics such as split-plot design, confounding, fractional replication, incomplete block designs, and response surface designs. Prerequisite: STA 5206.

STA 5236–STA 5237 Regression Analysis I & II (5–5) (SS,F)
A comprehensive review of the role of linear models in statistics. Extensive use is made of matrix notation, and a prior course in linear algebra is imperative. The fundamental theorems underlying regression analysis and the analysis of variance will be covered. Such topics as the Gauss-Markov Theorem, generalized least squares, and estimation and testing of hypotheses will be covered. Prerequisites: STA 3322 and MAS 3103.

STA 5446–STA 5447 Probability Theory I & II (5–5)(S,SS)
This course is designed to acquaint the student with the basic fundamentals of probability theory. It reviews the basic foundations of probability theory, covering such topics as discrete probability spaces, random walk, Markov Chains (transition matrix and ergodic properties), strong laws of probability, convergence theorems, and law of iterated logarithm. Prerequisite: MAC 3413.

STA 5606 Mathematical Techniques of Operations Research (5)(W)
This course surveys the mathematical methods used in operations research. Topics will be chosen from linear programming, dynamic programming, integer programming, network analysis, classical optimization techniques, and applications such as inventory theory. Prerequisite: MAP 5117. Corequisite: COP 3530.

STA 5676 Reliability Engineering I (5)(SS)
The course material is designed to give the student a basic understanding of the statistical and mathematical techniques which are used in engineering reliability analysis. A review will be made of the basic fundamental statistical techniques required. Subjects covered include: distributions used in reliability (exponential, binomial, extreme value, etc.); tests of hypotheses of failure rates; prediction of component reliability; system reliability prediction; and reliability apportionment. Prerequisite: STA 3322.

STA 5677 Reliability Engineering II (5)(F)
The course is designed for those interested in using probability models such as Markov matrices to analyze the reliability of systems. The use of transition matrices to represent the state of repairable and non-repairable systems will be stressed. Series and parallel constructed systems will be covered. Topics such as the reliability and availability of systems, average down time, required repairmen pool sizes, and number and composition of spare parts pools will be covered. Prerequisites: MAS 3103, and STA 5676.

STA 5707/PSY 5246 Multivariate Analysis in Applied Psychological Research (4)(W)
Review of linear algebra. Topics include multiple regression, one & two sample multivariate analysis, profile analysis, multivariate analysis of variance, principal component & factor analysis. Computer software packages will be used for some analyses. Prerequisites: STA 3122 and STA 3123 or equivalent. Linear algebra and STA 5126 recommended.

STA 5826 Stochastic Processes (5)(F)
This course is intended to provide the student with the basic concepts of stochastic processes, and the use of such techniques in the analysis of systems. Subjects include: Markov Processes, queuing theory, renewal processes, birth and death processes, Poisson and Normal Processes. Applications to system reliability analysis, behavioral science, and natural sciences will be stressed. Prerequisite: STA 5447.

STA 5906 Independent Study (VAR)(F,W,S,SS)
Individual conferences, assigned reading, and reports on independent investigation.

Modern Language Majors

R. Reinaldo Sanchez, *Associate Professor, Acting Chairperson*
James Crosby, *Professor*
Yvonne Guers-Villate, *Professor*
Ramon Mendoza, *Professor (North Miami Campus)*
Florence Yudin, *Professor*
Frances Aid, *Associate Professor*
Frederick Bouma, *Associate Professor*
John Jensen, *Associate Professor*
Maida Watson Espener, *Assistant Professor*
Marcelle Welch, *Assistant Professor*
Gene Leroy, *Instructor*

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: four semesters of elementary and intermediate foreign language or equivalent proficiency. If these courses are not completed prior to entry to FIU, they will be required as part of the upper division program as non-major electives.

UPPER DIVISION PROGRAM:

	Quarter Hours
*Required Courses:**	45
Foreign language	
*Electives:**	45
	90

*Students in the Teacher Preparation Program carry two majors: Modern Language and Modern Language Education. They must request admission to *both* programs. (Students interested in teacher certification refer to the School of Education, page 2.

REQUIREMENTS FOR ALL MODERN LANGUAGE MAJORS: All majors must have a designated faculty advisor, and all are required to take 45 credits in the department of Modern Languages, with a grade of "C" or better.

REQUIREMENTS FOR SPANISH MAJORS: There is no fixed sequence of courses required (e.g. SPN 3420, SPN 3421, SPN 3422); but a major in Spanish is expected to demonstrate proficiency in the target language at the level of SPN 3420 or SPN 3421 before attempting other advanced courses. He must take a minimum of 10 credits in linguistics–of which 5 should be History of the Language or Intro-

(Continued)

Modern Languages

duction to Linguistics—and a minimum of 10 credits in literature.

REQUIREMENTS FOR FRENCH MAJORS: The requirements for a major in French are: 3 or 4 literature courses; 1 civilization course; 1 linguistics course. The remaining credits should be taken in language courses, such as FRE 3201, FRE 3420, FRE 3421, FRE 3780, FRT 3800, FRT 3810—unless the student can demonstrate proficiency in these areas. A student is also generally expected to take an introductory course to literature such as FRW 3820 before registering for upper level literature courses.

REQUIREMENTS FOR OTHER LANGUAGE MAJORS: A major in a language other than Spanish or French may take only 30 credits in the major target language, but completion of at least three quarters of a second foreign language is recommended. There is no fixed sequence of courses required, and a student may enroll in any course offered for majors, provided he or she meets the course prerequisites.

Basic Language Instruction

LOCATION: Tamiami and North Miami Campuses

The Department of Modern Languages offers five-quarter sequences of instruction in basic French, German, Hebrew, Italian, Portuguese and Spanish.

The courses in basic language instruction are designed primarily for persons wishing to acquire basic conversational ability in a foreign language; but they provide training in all four language skills: listening, speaking, reading, and writing. Students are advised to consult the Departmental course listing for specific sections of French, German, Hebrew, Italian, Portuguese, and Spanish. Contingent upon demand, the Department of Modern Languages will offer courses in other foreign languages.

Course Descriptions

Definition of Prefixes

ESL—English as a Second Language; FOL—Foreign Languages; FOT—Foreign Languages in Translation; FOW—Foreign Languages, Comparative Literature; FRE—French Language; FRT—French Literature in Translation; FRW—French Literature (Writings); GER—German Language; GET—German Literature in Translation; HEB—Hebrew; HUM—Humanities; ITA—Italian Language; ITT—Italian Literature in Translation; LIN—Linguistics; POR—Portuguese Language; POW—Portuguese Literature (Writings);PRT—Portuguese in Translation; SPN—Spanish Language; SPT—Spanish Literature in Translation; SPW—Spanish Literature (Writings).

ENGLISH AS A SECOND LANGUAGE

ESL 3361 English Grammar Review (VAR)
Review and practice of English grammatical patterns; emphasis on oral communication.

ESL 4301 Advanced Oral English (VAR)
Intensive practice in pronunciation, vocabulary and oral communication skills.

FOREIGN LANGUAGE: GENERAL

FOL 3000 Elementary Foreign Language Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. For languages not often taught. This course is not part of a series. No prerequisites.

FOL 3732 Romance Linguistics (5)
The common and distinctive romance features. Survey of linguistic geography and internal/external influences.

FOL 3905 Independent Study (5)
Project, field experience, readings, or apprenticeship.

FOL 3930 Special Topics (5)
Readings and discussion of literary/linguistic topics to be determined by students and teacher.

FOL 3949 Cooperative Education in Modern Languages (5)
A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 3955 Foreign Study (I5)
Intermediate level. One quarter full-time credit in foreign residence and study. Individual cases will be evaluated for approval.

FOL 4013 Language Skills for Professional Personnel (VAR)
The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FOL 4905 Independent Study (VAR)
Project, field experience, readings, or research.

FOL 4930 Special Topics (5)
Independent readings, research, or project.

FOL 4935 Senior Seminar (5)
Topics and approach to be determined by students and instructor.

FOL 4949 Cooperative Education in Modern Languages (5)
A student majoring in one of the Humanities (English, History, Modern Languages, Visual Arts or Performing Arts) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

FOL 4958 Foreign Study: Advanced Language/Literature (I5)
Full-quarter credit for foreign residence and study/work. (Approval of Department required).

FOL 5735 Romance Linguistics (5)
The common and distinctive romance features. Survey of linguistic geography and internal/external influences.

FOL 5906 Independent Study (VAR)
Project, field experience, readings, or research.

FOT 3110 Literature in Translation (5)
Masterpieces of world literature in English. Comparative use of the original text. Discussion and interpretation.

FOT 3800 Translation Skills (5)
Emphasis on basic principles and practice application.

FOT 3810 Creative Writing/Translation (5)
Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

FOT 4130 European Literature in Translation (5)
For students proficient in more than one foreign language. Content and focus to be determined by student and teacher.

FOT 4801 Professional Translation (5)
Techniques and resources for professional translation. Prerequisite: FOT 3800.

FOT 5131 Literature in Translation (5)
Masterpieces of world literature. Open to students who are proficient in more than one language.

FOT 5802 Translation Arts (5)
Techniques of professional translation. Prerequisite; FOT 4801.

FOW 3520 Prose and Society (5)
The dynamics of participation and alienation between prose writers and their environment.

FOW 3540 Bicultural Writings (5)
Experiment in linguistic pluralism. Content and focus to be determined by the international community.

(Continued)

Modern Languages

FOW 3580 Intellectual History (5)
The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

FOW 3582 Literature of Reform (5)
The consciousness of change in verbal art.

FOW 3584 Literature of Repression (5)
The consciousness of constraints, their adoption and/or rejection in verbal art.

FOW 4390 Genre Studies (5)
Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FOW 4590 Creative Modes (5)
Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

FOW 4790 The Literary Generation (5)
The real and apparent shared ideals of an artistic generation, its influence and range.

FOW 4810 Problems in Reading and Interpretation (5)
The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FOW 5395 Genre Studies (5)
Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FOW 5545 Bicultural Writings (5)
Experiment in linguistic pluralism. Content and focus to be determined by the international community.

FOW 5587 Comparative Studies (5)
Cross-over and distinctiveness in a multilanguage problem, period, or esthetic.

FOW 5934 Special Topics in Language/Literature (5)
Content and objectives to be determined by students and teacher.

FOW 5938 Graduate Seminar (5)
Topic and approach to be determined by students and instructor. (Approval of the Department required.)

FRENCH

FRE 3000 Elementary French Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

FRE 3120 Beginning French Instruction I (5)
Provides training in the acquisition and application of basic language skills.

FRE 3121 Beginning French Instruction II (5)
Provides training in the acquisition and application of basic language skills.

FRE 3122 Beginning French Instruction III (5)
Provides training in the acquisition and application of basic language skills.

FRE 3200 Intermediate French Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

FRE 3201 Intermediate French Instruction II (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

FRE 3270 Foreign Study (15)
Intermediate level. One quarter full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

FRE 3415 Communication Arts (5)
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

FRE 3420 Review Grammar/Writing I (5)
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

FRE 3421 Review Grammar/Writing II (5)
Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and composition.

FRE 3500 Civilization I (5)
Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

FRE 3700 Introduction to General Linguistics (5)
Examination and synthesis of the concepts and perspectives of major contributions to language theory.

FRE 3705 Applied Linguistics (5)
Examination of available linguistic materials for self-instruction. Problem solving in syntax and phonetics, through the application of modern/traditional methods.

FRE 3780 Phonetics (5)
The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity.

FRE 3820 Dialectology (5)
Definition and analysis. Problem-solving in dialect classification.

FRE 3840 History of the Language (5)
The internal and external history of language development. Examination of model texts from key periods of evolution.

FRE 4013 Language Skills for Professional Personnel (VAR)
The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

FRE 4470 Foreign Study: Advanced Language/Literature (15)
Full-quarter credit for foreign residence and study/work. (Approval of Department required.)

FRE 4501 Civilization II (5)
Open to any student who understands the target language. The making of a modern culture. The ideological, political and economic background of contemporary culture.

FRE 4562 Studies in Bilingualism (5)
Readings and analysis of bilingual programs and binational goals.

FRE 4791 Contrastive Phonology (5)
Contrasts in the sound systems of English and French.

FRE 4800 Contrastive Morphology (5)
Contrasts in the morphology and syntax of English and French.

FRE 4935 Senior Seminar (5)
Topic and approach to be determined by students and instructor.

FRE 5060 Language for Reading Knowledge (5)
Designed primarily for graduate students who wish to attain proficiency for M.A. and Ph.D. requirements. Open to any student who has no prior knowledge of the language.

FRE 5061 Language for Reading Knowledge (5)
Emphasis on translation of materials from the student's field of specialization. Prerequisite: FRE 5060, or the equivalent.

(Continued)

Modern Languages

FRE 5416 Communication Arts (5)
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

FRE 5565 Studies in Bi-Lingualism (5)
Readings and analysis of bi-lingual programs and binational goals.

FRE 5730 Special Topics in Linguistics (5)
Content to be determined by students and instructor. (Approval of Department required.)

FRE 5908 Independent Study (VAR)
Project, field experience, readings, or research.

FRT 3110 Literature in Translation (5)
Masterpieces of French literature in English. Comparative use of the original text. Discussion and interpretation.

FRT 3800 Translation Skills (5)
Emphasis on basic principles and practice application.

FRT 3810 Creative Writing/Translation (5)
Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

FRT 4801 Professional Translation (5)
Techniques and resources for professional translation. Prerequisite: FRT 3810.

FRT 5118 Literature in Translation (5)
Masterpieces of world literature. Open to students who are proficient in more than one language.

FRT 5802 Translation Arts (5)
Techniques of professional translation. Prerequisite: FRT 4801.

FRW 3520 Prose and Society (5)
The dynamics of participation and alienation between prose writers and their environment.

FRW 3580 Intellectual History (5)
The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

FRW 3582 Literature of Reform (5)
The consciousness of change in verbal art.

FRW 3584 Literature of Repression (5)
The consciousness of constraints, their adoption and/or rejection in verbal art.

FRW 3820 Stylistics/Explication de Texte (5)
Close reading and analysis of prose and poetry. Introduction to the methods of literary criticism. Selected readings in international sources.

FRW 3905 Independent Study (5)
Project, field experience, readings, or apprenticeship.

FRW 3930 Special Topics (5)
Readings and discussion of literary/linguistic topics to be determined by students and instructor.

FRW 4152 European Literature in Translation (5)
For students proficient in more than one foreign language. Content and focus to be determined by students and instructor. (Conducted in French.)

FRW 4390 Genre Studies (5)
Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FRW 4590 Creative Modes (5)
Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

FRW 4790 The Literary Generation (5)
The real and apparent shared ideals of an artistic generation, its influence and range.

FRW 4810 Problems in Reading and Interpretation (5)
The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

FRW 4905 Independent Study (VAR)
Project, field experience, readings, or research.

FRW 4930 Special Topics (5)
Independent readings, research, or project.

FRW 5150 Comparative Studies (5)
Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

FRW 5395 Genre Studies (5)
Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

FRW 5934 Special Topics in Language/Literature (5)
Content and objectives to be determined by student and instructor.

FRW 5938 Graduate Seminar (5)
Topic and approach to be determined by students and instructor. (Approval of the Department required.)

GERMAN

GER 3000 Elementary German Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

GER 3120 Beginning German Instruction I (5)
Provides training in the acquisition and application of basic language skills.

GER 3121 Beginning German Instruction II (5)
Provides training in the acquisition and application of basic language skills.

GER 3122 Beginning German Instruction III (5)
Provides training in the acquisition and application of basic language skills.

GER 3200 Intermediate German Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

GER 3201 Intermediate German Instruction III (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

GER 3420 Review Grammar/Writing I (5)
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

GER 4905 Independent Study (VAR)
Project, field experience, readings, or research.

GER 4930 Special Topics (5)
Independent readings, research, or project.

GER 5060 German for Reading Knowledge (5)
Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

GER 5061 German for Reading Knowledge (5)
Emphasis on translation of materials from the student's field of specialization. Prerequisite: GER 5060, or the equivalent.

GET 3100 Literature in Translation (5)
Masterpieces in German literature in English. Comparative use of the original text. Discussion and interpretation.

HEBREW

HEB 3000 Elementary Hebrew Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

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Modern Languages

HEB 3110 Beginning Hebrew Instruction I (5)
Provides training in the acquisition and application of basic language skills.

HEB 3111 Beginning Hebrew Instruction II (5)
Provides training in the acquisition and application of basic language skills.

HEB 3112 Beginning Hebrew Instruction III (5)
Provides training in the acquisition and application of basic language skills.

HEB 3200 Intermediate Hebrew Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

HEB 3201 Intermediate Hebrew Instruction II (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

ITALIAN

ITA 3000 Elementary Italian Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

ITA 3120 Beginning Italian Instruction I (5)
Provides training in the acquisition and application of basic language skills.

ITA 3121 Beginning Italian Instruction II (5)
Provides training in the acquisition and application of basic language skills.

ITA 3122 Beginning Italian Instruction III (5)
Provides training in the acquisition and application of basic language skills.

ITA 3200 Intermediate Italian Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

ITA 3201 Intermediate Italian Instruction II (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

ITA 3420 Review Grammar/Writing I (5)
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

ITA 4905 Independent Study (VAR)
Project, field experience, readings, or research.

ITA 4930 Special Topics (5)
Independent readings, research, or project.

ITT 3110 Literature in Translation (5)
Masterpieces of Italian literature in English. Comparative use of the original text. Discussion and interpretation.

LINGUISTICS

LIN 3010 Introduction to General Linguistics (5)
Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in English.)

LIN 3200 Phonetics (5)
The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity.

LIN 3400 Applied Linguistics (5)
Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. (Conducted in English.)

LIN 3610 Dialectology (5)
Definition and analysis. Problem-solving in dialect classification.

LIN 4226 Contrastive Phonology (5)
For students proficient in more than one foreign language. Choice of languages to be determined by students and instructor.

LIN 4333 Contrastive Morphology (5)
For students proficient in more than one foreign language. Content and emphasis to be determined by students and instructor.

LIN 4418 Problems in Language Learning (5)
Primarily designed for prospective teachers, but open to all interested students. The course will aim to devise approaches to difficulties commonly experienced in syntax, usage, reading and comprehension.

LIN 4620 Studies in Bilingualism (5)
Readings and analysis of bilingual programs and binational goals.

LIN 5625 Studies in Bilingualism (5)
Readings and analysis of bilingual programs and binational goals.

LIN 5934 Special Topics in Linguistics (5)
Content to be determined by students and instructor. (Approval of the Department required.)

PORTUGUESE

POR 3000 Elementary Portuguese Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

POR 3120 Beginning Portuguese Instruction I (5)
Provides training in the acquisition and application of basic language skills.

POR 3121 Beginning Portuguese Instruction II (5)
Provides training in the acquisition and application of basic language skills.

POR 3122 Beginning Portuguese Instruction III (5)
Provides training in the acquisition and application of basic language skills.

POR 3200 Intermediate Portuguese Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

POR 3201 Intermediate Portuguese Instruction II (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

POR 3420 Review Grammar/Writing I (5)
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

POW 4905 Independent Study (VAR)
Project, field experience, readings, or research.

POW 4930 Special Topics (5)
Independent readings, research, or project.

PRT 3401 Literature in Translation (5)
Masterpieces of Portuguese literature in English. Comparative use of the original text. Discussion and interpretation.

SPANISH

SPN 3000 Elementary Spanish Conversation (VAR)
Emphasis on oral skills, contemporary language and culture. Content oriented to students with specific professional or leisure interests. This course is not part of a series. No prerequisites.

SPN 3120 Beginning Spanish Instruction I (5)
Provides training in the acquisition and application of basic language skills.

SPN 3121 Beginning Spanish Instruction II (5)
Provides training in the acquisition and application of basic language skills.

(Continued)

Modern Languages

SPN 3122 Beginning Spanish Instruction III (5)
Provides training in the acquisition and application of basic language skills.

SPN 3200 Intermediate Spanish Instruction I (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

SPN 3201 Intermediate Spanish Instruction II (5)
Provides training in the acquisition and application of basic language skills. Prerequisite: One year of basic instruction.

SPN 3270 Foreign Study (15)
Intermediate level. One quarter full-time credit for foreign residence and study. Individual cases will be evaluated for approval.

SPN 3415 Communication Arts (5)
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

SPN 3420 Review Grammar/Writing I (5)
Practice in contemporary usage through selected readings in culture and civilization. Development of writing and speaking ability in extemporaneous contexts. The course will be conducted exclusively in the target language.

SPN 3421 Review Grammar/Writing II (5)
Examination of grammatical theory; discussion of the modern essay. Practice in the detection and correction of errors in usage. The course will focus on current international events as content for informal talks and composition.

SPN 3500 Civilization I (5)
Open to any student who understands the target language. The development of a particular civilization. Emphasis on the evolution of a society, its ideas and its values.

SPN 3705 Applied Linguistics 5
Examination of available linguistic materials for self-instruction. Problem-solving in syntax and phonetics, through the application of modern/traditional methods. (Conducted in Spanish.)

SPN 3733 Introduction to General Linguistics (5)
Examination and synthesis of the concepts and perspectives of major contributions to language theory. (Conducted in Spanish.)

SPN 3780 Phonetics (5)
The application of phonetic theory and practice for speech refinement. Study of sound patterns in communication and creative activity.

SPN 3820 Dialectology (5)
Definition and analysis. Problem-solving in dialect classification.

SPN 3840 History of the Language (5)
The internal and external history of language development. Examination of model texts from key periods of evolution.

SPN 3905 Independent Study (5)
Project, field experience, readings, or apprenticeship.

SPN 4013 Language Skills for Professional Personnel (VAR)
The course is geared to the special linguistic needs of community groups (medical, business, technical, etc.).

SPN 4470 Foreign Study: Advanced Language/Literature (15)
Full-quarter credit for foreign residence and study/work. (Approval of the Department required.)

SPN 4501 Civilization II (5)
Open to any student who understands the target language. The making of a modern culture. The ideological, political and economic background of contemporary culture.

SPN 4562 Studies in Bilingualism (5)
Readings and analysis of bilingual programs and binational goals.

SPN 4790 Contrastive Phonology (5)
Contrasts in the sound systems of English and Spanish.

SPN 4800 Contrastive Morphology (5)
Contrasts in the morphology and syntax of English and Spanish.

SPN 4905 Independent Study (VAR)
Project, field experience, readings, or research.

SPN 4936 Senior Seminar (5)
Topic and approach to be determined by students and instructor.

SPN 5060 Language for Reading Knowledge (5)
Designed primarily for graduate students who wish to attain proficiency for M.A. or Ph.D. requirements. Open to any student who has no prior knowledge of the language.

SPN 5061 Language for Reading Knowledge (5)
Emphasis on translation of materials from the student's field of specialization. Prerequisite: SPN 5060, or the equivalent.

SPN 5416 Communication Arts (5)
Oral interpretation and dramatic reading. Original and non-original texts will be the content of the course. Study of shared modes of experience and their individual linguistic expression in an acquired language.

SPN 5565 Studies in Bilingualism (5)
Readings and analysis of bilingual programs and binational goals.

SPN 5908 Independent Study (VAR)
Project, field experience, readings, or research.

SPN 5930 Special Topics in Linguistics (5)
Content to be determined by students and instructor. (Approval of the Department required.)

SPT 3110 Literature in Translation (5)
Masterpieces of Hispanic literature in English. Comparative use of the original text. Discussion and interpretation.

SPT 3800 Translation Skills (5)
Emphasis on basic principles and practice application.

SPT 3810 Creative Writing/Translation (5)
Training through non-structured writing. Examination of various approaches to the problems and objectives of creative translation.

SPT 4801 Professional Translation (5)
Techniques and resources for professional translation. Prerequisite: SPT 3800.

SPT 5118 Literature in Translation (5)
Masterpieces of world literature. Open to students who are proficient in more than one language.

SPT 5802 Translation Arts (5)
Techniques of professional translation. Prerequisite: SPT 4801

SPW 3520 Prose and Society (5)
The dynamics of participation and alienation between prose writers and their environment.

SPW 3580 Intellectual History (5)
The interaction or dissociation among writers in a critical historical period. Study of primary sources and their contemporary evaluations.

SPW 3582 Literature of Reform (5)
The consciousness of change in verbal art.

SPW 3584 Literature of Repression (5)
The consciousness of constraints, their adoption and/or rejection in verbal art.

SPW 3820 Stylistics (5)
Close reading and analysis of prose and poetry. Introduction to the methods of literary criticism. Selected readings in international sources.

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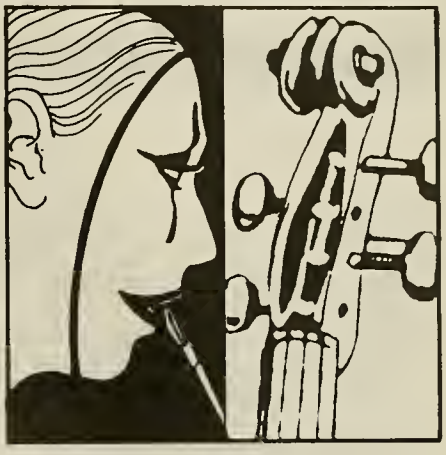
Performing Arts



SPW 3930 Special Topics (5)
Readings and discussion of literary/linguistic topics to be determined by students and instructor.

SPW 4152 European Literature in Translation (5)
For students proficient in more than one foreign language. Content and focus to be determined by students and instructor. (Conducted in Spanish.)

SPW 4390 Genre Studies (5)
Examination of a single literary form (e.g. Short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

SPW 4590 Creative Modes (5)
Discussion of a single mode or a plurality of epoch styles such as classical/baroque, realism/surrealism. The peculiar/common features of expressive media.

SPW 4790 The Literary Generation
The real and apparent shared ideals of an artistic generation, its influence and range.

SPW 4810 Problems in Reading and Interpretation (5)
The identification and appreciation of techniques for sensitive reading and discussion of literary texts.

SPW 4930 Special Topics (5)
Independent readings, research, or project.

SPW 5155 Comparative Studies (5)
Cross-over and distinctiveness in a multi-language problem, period, or aesthetic.

SPW 5391 Genre Studies (5)
Examination of a single literary form (e.g. short story, poetry), or the study of interaction between literary types (e.g. novel and drama).

SPW 5934 Special Topics in Language/Literature (5)
Content and objectives to be determined by students and instructor.

SPW 5936 Graduate Seminar (5)
Topic and approach to be determined by students and instructor. (Approval of the Department required.)

Music Major

Philip H. Fink, *Professor and Chairperson (Music)*
Clair T. McElfresh, *Professor (Music)*
Yoshihiro Obata, *Associate Professor (Music)*
Joseph Rohm, *Associate Professor (Music)*
Therald Todd, *Associate Professor (Theater-Program Director)*
Violet Vagramian, *Associate Professor (Music)*
Judith Edwards, *Assistant Professor (Theater)*
Marie Leeds, *Assistant Professor (Music)*
Paul Mazer, *Assistant Professor (Theater)*

Music students at FIU come from a wide variety of academic backgrounds from both Florida and other states. Because of this diversity, the Faculty of Music gives three basic preliminary examinations in order to assist the student to eliminate any deficiencies:

1) Music History—consisting of all periods of history
2) Music Theory—consisting of melodic and harmonic dictation and written harmonization
3) Performance Skills—consisting of performing one or more solo works for the faculty during the first week of classes.

The preliminary examinations give the faculty an idea of a student's level of proficiency at entrance into the University, as well as give a frame of reference for the progress that should be made during the first quarter. Students whose level of achievement is not sufficiently advanced for accepted junior level placement will be advised how those deficiencies may be overcome.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Music*

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses: applied, 12 quarter hours; organizations, 6 quarter hours; theory, 18 quarter hours; sight-singing, 6 quarter hours.

Remark: The student who does not have an Associate of Arts degree, or lacks proficiency in theory, sight-singing, and performance in a major instrument will be expected to take more than 90 quarter hours of upper division work to complete the degree.

UPPER DIVISION PROGRAM:
A grade of C or better in all courses required for the major is necessary for graduation.

APPLIED MUSIC

	Quarter Hours
Required Courses:	**60**
Theory: MUT 4311, MUT 3416, MUT 3611	15
History: MUH 3211, MUH 3212, MUH 3372	15
Organizations (6 quarters)	12
Conducting	2
Applied (6 quarters)	12
Recital and Research and Directed Study	4
Electives:	**30**
	90

CONDUCTING

Required Courses:	**60**
Theory	15
History	15
Organizations (6 quarters)	12
Conducting	6*
Applied (6 quarters)	12
*The student is required to conduct a performing organization (approximately two numbers—not a complete program) during his or her senior year.	
Electives:	**30**
	90

THEORY AND COMPOSITION

	Quarter Hours
Required Courses:	**60**
Theory	15
Composition	10
History	10
Organizations (5 quarters)	10
Conducting	2
Applied (5 quarters or 5 hours applied and 5 hours composition lessons)	10
Recital and Research and Directed Study*	3*
*The student must perform an original composition with analysis, or lecture on a theoretical subject for the student body.	
Electives:	**30**
	90

MUSICOLOGY

Required Courses:	**60**
Theory	15
History	20
Organizations (5 quarters)	10
Conducting	2

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Performing Arts

Applied (5 quarters)		10
Research*		3*
*The student must lecture for the student body, as part of the research requirement.		
Electives:		30
Directed Study based on specialized areas of music history under advisor's supervision–minimum		10
Foreign Language (reading proficiency) 2 quarters		10
Other electives to be determined in consultation with an advisor		10
		90

DUAL DEGREE MAJOR

Required Music Courses:		62
Theory		15
History		15
Organizations (6 quarters)		12
Conducting		4
Applied (6 quarters)		12
Research and Recital		2
Guitar MVS 3116		2
Required Education Courses:		45
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Lab I	5
EDG 3322	General Teaching Lab II	5
RED 4325	Reading	5
MUE 3332	Special Teaching Lab Music I	5
MUE 4341	Special Teaching Lab Music II	5
MUE 4940	Student Teaching	15
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(Students interested in teacher certification refer to the School of Education, page 2.)

Course Descriptions

Definition of Prefixes

HUM–Humanities; MUC–Music: Composition; MUE–Music: Education; MUG–Music: Conducting; MUH–Music-History/Musicology; MUL–Music: Literature; MUM–Music: Commercial; MUN–Music: Ensembles; MUS–Music; MUT–Music: Theory; MVB–Applied Music-Brass; MVK–Applied Music-Keyboard; MVP–Applied Music-Percussions; MVS–Applied Music-Strings; MVV–Applied Music-Voice; MVW–Applied Music-Woodwinds.

MUC 4201 Music Composition I (5)
A course designed to give the advanced student intensive experience in creative writing. Compositional techniques and devices will be studied, through an analysis of works by major composers. Prerequisite: Orchestration, or permission of instructor.

MUC 4202 Music Composition II (5)
A continuation of Music Composition 1. The larger forms of music composition are analyzed and composed. Prerequisite: Music Composition 1, or permission of instructor.

MUE 3140 Solfege (5)
A course designed to strengthen and build the student's ability to write and perform melodic, harmonic and keyboard dictation. It will also provide a rhythm pattern sequence necessary to write and understand the modern idiom of score reading, analysis and transposition.

MUG 4101 Basic Conducting (2)
A basic conducting course to gain fundamental technique and interpretation. A prerequisite for both advanced instruments and choral conducting.

MUG 4201 Choral Conducting (2)
With a background in basic theory, and having performed in organizations, the student will develop techniques of group conducting including madrigal, glee, choir, etc. A survey of choral literature will be included. Prerequisite: Basic Conducting.

MUG 4301 Instrumental Conducting (2)
With a background in basic, theory, and having performed in organizations, the student will develop a knowledge of baton technique, score reading, and interpretation. Prerequisite: Basic Conducting.

MUG 5105 Advanced Conducting Techniques (2)
An extension of form and analysis, with interpretation both in instrumental and choral conducting. Twentieth century scoring and symbol interpretation will be studied in depth, with actual conducting experience required.

MUH 3116 Evolution of Jazz (5)
A history course that surveys jazz styles from mid-19th century to 1977. A sociological and musical look at jazz, the personalities and their experience.

MUH 3211 Music History Survey (5)
A survey of music from antiquity to 1750. Lecture on historical styles will be supplemented with slides, recordings and music analysis.

MUH 3212 Music History Survey (5)
A survey of music from 1750 to the present. Lectures on historical styles will be supplemented with slides, recordings, and musical analysis.

MUH 3372 Twentieth Century Music: Exploration (5)
A exploration of music since 1900. Lectures on style plus demonstrations will be supplemented with recordings and analysis. Elements of the popular idiom will be investigated.

MUH 5375 Twentieth Century Music: "New Dimensions" (4)
A technical study of music since 1900. Lectures on style plus demonstrations and practical application will be supplemented with recordings and analysis. Electronic and multi-media performance will be accented.

MUL 3011 Understanding and Enjoyment of Music I (5)
A non-technical introduction to program music of the 19th century, and folk/popular music of the 20th century.

MUL 3012 Understanding and Enjoyment of Music II (5)
A non-technical introduction to music before the 1800's and music of the 20th century. Comparisons of music up to and including electronic music.

MUL 4400 Keyboard Literature (5)
Study of solo works for the keyboard from historical beginnings to the present. Performance practices and stylistic analysis will be empahasized, with illustrations of representative works.

MUL 4500 Symphonic Literature (5)
Survey of symphonic literature from the 17th century to present day. Analysis and illustrations of representative works.

MUL 4661 History and Literature of Opera (5)
Chronological survey of opera literature from the 17th century to present day. Analysis and performance of representative works.

MUM 4301 Business of Music (5)
Principles and practices of modern publishing techniques; copyright laws; wholesale and retail distribution of music. Performance rights; agreements and relations between producers, directors, performers, writers, personnel managers, and booking agents. Prerequisite: Permission of instructor.

MUN 3140, MUN 4140, MUN 5145 Wind Ensemble (VAR)
A group of wind and percussion instrumentalists. Prerequisite: Permission of conductor.

(Continued)

Performing Arts

MUN 3210, MUN 4210, MUN 5215 Orchestra (VAR)
An instrumental ensemble performing works from the symphonic repertory. Prerequisite: Previous experience, and permission of conductor.

MUN 3340, MUN 4340, MUN 5345 Collegiate Chorale (VAR)
A small ensemble of selected mixed voices performing a repertoire in the modern popular idiom. Miniature contemporary accompaniment will be utilized.

MUN 3380, MUN 4380, MUN 5385 University Singers (VAR)
A chorus performing a repertoire primarily from great choral works. Large orchestral accompaniment as well as various instrumental ensembles will be utilized.

MUN 3460, MUN 4460, MUN 5465 Chamber Music (VAR)
Small ensemble in the performing of chamber music literature. Prerequisite: Permission of conductor.

MUN 3710, MUN 4710, MUN 5715 Studio Jazz (VAR)
An ensemble to provide creative professional-level experience in the contemporary popular idiom.

MUS 3905, MUS 5905 Directed Study (1–5)
Designed to provide areas of exploration and specialization beyond the basic selected study programs, such as electronic music, religious music literature, sound techniques, etc.

MUS 3910, MUS 4910, MUS 5910 Research (1–5)
Research composition or performance projects, under the guidance and direction of the music faculty. (May be repeated.)

MUS 3949 Cooperative Education in Performing Arts (5)
A student majoring in Performing Arts may spend several quarters fully employed in industry or government in a capacity relating to the major.

MUS 4949 Cooperative Education in Performing Arts (5)
A student majoring in Performing Arts may spend several quarters fully employed in industry or government in a capacity relating to the major.

MUT 3031 Music Theory I (5)
Designed to review and develop skills in basic theory, harmony, and ear training.

MUT 3032 Music Theory II (5)
Designed to review and further develop skills in basic theory, harmony, and ear training. Prerequisite: Music Theory I, or equivalent.

MUT 3416 Counterpoint (5)
A study of linear writing through species counterpoint. Two and three-part instrumental and vocal counterpoint of the 18th century: Canon, inventions, fugues. Particular emphasis will be placed on formal analysis. Prerequisite: Music Theory II, or equivalent.

MUT 3611 Form and Analysis (5)
Study and analysis from the smaller forms of musical composition to multimovement forms. Prerequisite: Counterpoint.

MUT 4311 Orchestration (5)
With a background of basic theory, the student will explore the techniques of writing and arranging for instruments in performing organizations and choral groups.

MUT 4561 Twentieth Century Theory–Composition (5)
This course will analyze and compose works using the following procedures: melodic-harmonic techniques developed in the late nineteenth century; serial, and improvisational techniques; and those derived from the use of electronic devices as performance media. Prerequisites: Survey of Basic Music, Counterpoint.

MUT 4641 Jazz Improvisation I (5)
A beginning course in Jazz improvisation that teaches fundamental aspects, chord structures and extensions, chord scales, melodic patterns, and tunes. Course will involve both theory and practical application. A concert will be held at conclusion of term.

MUT 4642 Jazz Improvisation II (5)
A follow-up course that both reinforces and extends all material learned in Jazz Improvisation I. Course stresses more complex chord structures, scales and tunes. A concert will be held at conclusion of the term.

MUT 5325 Arranging (4)
A course in practical arranging for the public school teacher, including choral, band, and popular arranging.

MVB 3334, MVB 4345, MVB 5355 Applied Music–Brass (1–2)
Individual instruction in applied music on trumpet, French horn, trombone, baritone horn, or tuba.

MVK 3331 MVK 4341, MVK 5351 Applied Music–Keyboard (1–2)
Individual instruction in applied music on piano or organ.

MVP 3331, MVP 4341, MVP 5350 Applied Music–Percussion (1–2)
Individual instruction in applied music on all percussion instruments.

MVS 3116 Guitar Skills (5)
Emphasis on music reading and elementary techniques. Open to all Florida International University students.

MVS 3216 Intermediate Guitar Skills (5)
Emphasis on techniques and styles such as calypso, folk, blues, classical and jazz. Open to all Florida International University students.

MVS 3332, MVS 4343, MVS 5353 Applied Music–Strings (1–2)
Individual instruction in applied music in violin, viola, cello, string bass, guitar, or harp.

MVS 4975 Recital and Research (2)
All music majors, before graduation, must present at least one half of a public recital, and pass an oral examination on the music programmed.

MVV 3100 Class Instruction-Voice (2–5)
Class instruction in voice designed to aid the student in developing performance skills and increased musical knowledge. (May be repeated.)

MVV 3331, MVV 4341, MVV 5351 Applied Music-Voice (1–2)
Individual instruction in applied music in voice.

MVW 3333, MVW 4345, MVW 5353 Applied Music–Woodwinds (1–2)
Individual instruction in applied music on the flute, oboe, clarinet, bassoon, or saxophone.

Theatre Major

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Fine Arts in Theatre*

LOWER DIVISION PREPARATION:
Recommended Courses: Three semester hours in acting; stagecraft; stage lighting; costuming; voice for the theatre; three to six hours in dance; and theatre workshop.

UPPER DIVISION PROGRAM:
The goal of the Theatre Program is to provide well rounded theatre training through classes and productions conducted with professional theatre discipline and the highest possible aesthetic standards. In addition to satisfactory

(Continued)

Performing Arts

completion of all course work, a Theatre Major is required to participate in all of the major productions presented during enrollment in the Theatre Program.

Required Courses:			**50**
TPP 3110	Acting I	5	
THE 4110, 4111	Theatre History I & II	10	
TPA 3200	Stagecraft I	5	
TPA 3220	Stage Lighting	5	
TPA 3010 or	Scenic Design I		
TPA 4230	Stage Costuming	5	
TPA 3290L-3294L	Technical Theatre Lab	10	
TPP 3650	Playscript Analysis	5	
TPP 3310	Directing	5	
Elective Courses:			**40**
			90

Minor in Theatre:

Required Courses:			**30**
THE 3000	Theatre Appreciation	5	
TPA 3200	Stagecraft I	5	
TPP 3110	Acting I	5	
TPP 3650	Playscript Analysis	5	
Theatre Electives			**10**

A grade of C or better in all courses required for the major is necessary for graduation.

Course Descriptions

Definition of Prefixes
DAA–Dance Activities; ORI–Oral Interpretation; SPC–Speech Communication; THE–Theatre; TPA–Theatre Production and Administration; TPP–Theatre-Performance and Performance Training.

THEATRE MAJOR

DAA 3100 Modern Dance Technique I (2)
Development of techniques and understanding of the art form of contemporary dance. (May be repeated.)

DAA 3101 Modern Dance Technique II (2)
A continuation of basic techniques and understanding of the art form of contemporary dance. (Prerequisite: DAA 3100 or permission of instructor) (May be repeated.)

DAA 3200 Ballet Technique I (2)
Development of techniques and understanding of ballet. (May be repeated.)

DAA 3201 Ballet Technique II (2)
A continuation of basic techniques and understanding of ballet. (Prerequisite: DAA 3200 or permission of instructor) (May be repeated.)

ORI 3000 Basic Oral Interpretation (5)
Development of the voice as an instrument for expressive interpretation of literature.

SPC 3600 Public Speaking (5)
Study of the principles of ethical and effective public speaking, with practice in the construction and delivery of original speeches before an audience. (For non-theatre majors only.)

THE 3000 Theatre Appreciation (5)
A study of theatre, process and product, for the audience.

THE 3051 Children's Theatre (5)
Techniques of selection, production and performance of plays for children

THE 3071 Introduction to Filmmaking (5)
For the beginning student of filmmaking. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.

THE 3075 Film Production I (5)
Conceptual study of total-filmmaking. Equipment, procedures, location, sets, actors, and production staff will be examined, from the point of view of the director. Student will conceptualize, shoot, and edit a short film. (Prerequisite: THE 3071 or permission of the instructor. May be repeated.)

THE 3510 Dramatic Theory and Criticism I (5)
A study of basic critical writings on the theatre, from Plato and Aristotle to the present. Plays will be studied and critiqued.

THE 3511 Dramatic Theory and Criticism II (5)
A continuation of Dramatic Theory and Criticism I, including practical application of principles in writing. Prerequisite: Dramatic Theory and Criticism I.

THE 4076 Film Production II (5)
Conceptual study of total filmmaking. Equipment, procedures, locations, sets, actors, and production staff will be examined, from the point of view of the director. Student will conceptualize, shoot and edit a short film. (Prerequisite: THE 3075, or permission of the instructor. May be repeated.)

THE 4110 Theatre History I (5)
The development of the theatre from its origins to the early 19th century.

THE 4111 Theatre History II (5)
The development of the theatre from early 19th century to the present.

THE 4820 Creative Dramatics (5)
The study of informal drama activity with children. Techniques of improvisation, sense recall, music and movement are employed.

THE 4916 Research (1–5)
Supervised individual investigation of special research projects. Credit will vary with the nature and scope of the project. (May be repeated.)

THE 4950 Theatre Internship (1–15)
Supervised internship in a professional company in acting, directing, stage management, design, technical theatre or theatre management.

THE 5916 Research (1–5)
Supervised individual investigation in special research projects. Credit will vary with the nature and scope of the project. (May be repeated)

THE 5940 Performance and Production (1–5)
Supervised work in university, community or professional theatre production on an internship basis. Credit will vary with amount of time and responsibility involved. (If taken for less than maximum credit, may be repeated–for a total of not more than 15 quarter hours.)

TPA 3010 Scenic Design I (5)
Fundamentals of designing effective settings for the play. Discussion and practice in: analysis, research, the creation of appropriate and exciting environments for the actor, and basic skills in rendering and model making. (Prerequisite for Theatre majors–TPA 3200)

TPA 3200 Stagecraft I (5)
An introduction to construction techniques used in stage. Direct experience with wood and metal working tools, blueprint reading, and various materials including wood, metal, plastics and fabrics. Lecture and laboratory.

TPA 3220 Stage Lighting (5)
Familiarization with stage lighting equipment, purposes and aesthetics of stage lighting; development of an approach to designing lighting; practical experience in the use of equipment. Lecture and laboratory.

TPA 3250 Stage Make-up (5)
Fundamentals of straight and character make-up. Use of greasepaint, and three dimensional techniques.

TPA 3290L Technical Theatre Lab I (2)
Supervised crew work in construction, painting, lighting, costuming and running major productions. Required of Theatre majors.

TPA 3291L Technical Theatre Lab II (2)
Supervised crew work. Required of Theatre majors.

TPA 3292L Technical Theatre Lab III (2)
Supervised crew work. Required of Theatre majors.

(Continued)

Philosophy and Religious Studies

TPA 3293L Technical Theatre Lab IV (2)
Supervised crew work. Required of Theatre majors.

TPA 3294L Technical Theatre Lab V (2)
Supervised crew work. Required of Theatre majors.

TPA 4061 Scenic Design II (5)
Advanced skills in setting the mood of, and creating movement through a theatrical space. Emphasis will be placed upon rendering techniques and model making. (Prerequisite: TPA 3010.)

TPA 4201 Stagecraft II (5)
Advanced problems in the construction and movement of scenery, properties and special effects. (Prerequisite: TPA 3200.)

TPA 4230 Stage Costuming I (5)
Fundamentals of costume design. Study of period, character and concept. Familiarization with fabrics, and techniques of construction and trim.

TPA 4231 Stage Costuming II (5)
Advanced skills in designing, rendering and construction costumes. Includes pattern making and charting the show. (Prerequisite: TPA 4230)

TPA 4260 Sound for the Theatre (5)
A study of the uses of sound effects and high fidelity electronics in theatrical production.

TPA 4400 Theatre Management (5)
Survey of all aspects of theatre administration: budget planning and maintenance; public relations; box office and house management; unions and contracts.

TPP 3110 Acting I (5)
This course is designed to free the actor as an instrument of his or her craft through improvisation, theatre games, and exercises. Work on basic voice projection, movement, stage language, scene study, and basic elements of character are included.

TPP 3111 Acting II (5)
Beginning scene study and character building, continuing work begun in Acting I. (Prerequisite: TPP 3110, TPP 3282)

TPP 3282 Theatre Speech and Movement (5)
Development of the actor's two main instruments: the voice and the body.

TPP 3310 Directing I (5)
Basic principles of play direction; including problems of selecting, analysing, casting and rehearsing plays. (Prerequisites: TPP 3650)

TPP 3650 Playscript Analysis (5)
Detailed playscript examination for directors, actors and designers, focusing on identification of those elements upon which successful theatre production depends.

TPP 3730 Dialects (5)
A study of dialects common to western theatre. Prerequisite: TPP 3100 (Acting).

TPP 4112 Acting III (5)
Advanced scene study, character and improvisation work. Elements of style, auditions techniques and ensemble playing will be explored. (Prerequisite: TPP 3111)

TPP 4280 Special Problems in Acting (5)
This course will concentrate on the Acting demands of a specific period, style, genre, or playwright. (Prerequisite: TPP 4112 or permission of instructor)

TPP 4311 Directing II (5)
A continued study of direction techniques culminating in the preparation of a play for public performances. (Prerequisite: TPP 3310)

TPP 4531 Stage Combat (5)
A study of combat techniques for the stage, including fencing, boxing, wrestling and tumbling.

TPP 4600 Playwriting (5)
Study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play. (May be repeated.)

Philosophy Major, Religious Studies Major

James Huchingson, *Assistant Professor and Chairperson*
Ricardo Arias, *Professor*
George Kovacs, *Professor*
Richard Konkel, *Associate Professor*
Stanislaus Grabarek, *Assistant Professor*
Bruce Hauptli, *Assistant Professor*
Kenneth Henley, *Assistant Professor*
Bongkil Chung, *Visiting Assistant Professor*
Richard Ketchum, *Visiting Assistant Professor*
J. Robin King, *Visiting Assistant Professor*

Philosophy Major

LOCATION: Tamiami Campus only
DEGREE: *Bachelor of Arts*
LOWER DIVISION PREPARATION:
Required Courses: None
Recommended Courses: Philosophy, Religion.
UPPER DIVISION PROGRAM:

	Quarter Hours	
Required Areas:		45
Epistemology	5	
Metaphysics	5	
Ethics and Aesthetics	5	
Logic	5	
History of Philosophy	10	
Philosophy Seminar	5	
Other Philosophy Courses	10	
Courses in one other discipline		20
Electives:		25
		90

A grade of "C" or better in all courses required for the major is necessary for graduation.

Remarks: A more detailed description of the Philosophy Program is contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in philosophy with the approval of a faculty member of the Department.

Students are also encouraged to consider a "dual-major," and thus simultaneously meet the requirements of two academic majors. In this case, the twenty quarter hour credits required in one other academic discipline (as part of the Philosophy Major) would be met by courses taken towards the second major.

The College of Arts and Sciences requires for the bachelor's degree that the student take a minimum of 10 quarter hours outside the department sponsoring his or her major program. For the various ways of meeting this requirement, please consult the Department.

The Department offers many of its courses at the North Miami Campus and also participates in the Humanities Major.

(Continued)

Philosophy and Religious Studies

Religious Studies Major

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses: Religion, Philosophy

UPPER DIVISION PROGRAM:

	Quarter Hours	
Required Areas:		45
Religion and Culture	10	
Eastern Studies	5	
Biblical Studies	5	
Religious Studies Seminar	5	
Other Religious Studies Courses or Optional Tracks	20	
Courses in one other discipline		20
Electives:		25
		90

A grade of "C" or better in all courses required for the major is necessary for graduation.

Remarks: A more detailed description of the Religious Studies Program is contained in a brochure available at the Department of Philosophy and Religion. Students select their required courses in religious studies with the approval of a faculty member of the Department.

Students are also encouraged to consider a "dual-major" i.e., simultaneously meet the requirements of two academic majors. In this case, the twenty quarter hour credits required in one other academic discipline (as part of the Religious Studies Major) would be met by courses taken towards the second major.

The College of Arts and Sciences requires for the bachelor's degree that the student take a minimum of 10 quarter hours outside the department sponsoring his or her major program. For the different ways of meeting this requirement, please consult the Department.

The Department offers many of its courses at the North Miami Campus and also participates in the Humanities Major.

Minor in Philosophy:

A student majoring in another academic discipline would earn an academic minor in philosophy by taking an approved pattern of at least four philosophy courses (20 quarter hours), based upon an academic rationale or unifying study theme, and approved by the Chairperson of the Department. An acceptable minor in philosophy would be four courses in one of the areas designated in the course list of the Philosophy Program. A student may propose still other patterns of four philosophy courses for a minor, provided the selection is based upon an acceptable academic rationale.

Minor in Religious Studies:

A student majoring in another academic discipline would earn an academic minor in religious studies by taking a pattern of at least four REL courses (20 quarter hours), based on an academic rationale or unifying study theme, approved by the Chairperson of the Department. An acceptable minor in religious studies would be four courses in one of the areas designated in the course list of the Religious Studies Program. A student may propose still other patterns of four religious studies courses for a minor, provided the selection is based upon an acceptable academic rationale.

Course Descriptions

Philosophy Major

Definition of Prefixes

EDF–Education, Foundations; PHH–Philosophy, History of; PHI–Philosophy; PHM–Philosophy of Man and Society; PHP–Philosophers and Schools.

EDF 3542 Philosophy of Education (5)
Notions of philosophy and education will be applied in the review of prominent philosophies of education. Special attention will be given to the development of the student's own philosophy of education and to the importance of philosophical assumptions in curriculum designs and teaching strategies.

PHH 3042 Latin American Philosophy (5)
This course will examine the development of Latin American thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of prominent Latin American philosophers in the light of problems such as personal and cultural identity.

PHH 3100 Ancient Philosophy (5)
The basic concerns and teachings of representative philosophers and schools of thought, particularly in the Greek and Roman cultural settings, and linkages to their past and future are emphasized in this course.

PHH 3200 Medieval Philosophy (5)
The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the Middle Ages, and linkages to their past and future are emphasized in this course.

PHH 3420 Early Modern Philosophy (5)
The basic concerns and teachings of representative philosophers and schools of thought in the period from the Renaissance to Kant and the linkages to their past and future are emphasized in this course.

PHH 3440 Late Modern Philosophy (5)
The basic concerns and teachings of representative philosophers and schools of thought in the period from Kant to Nietzsche and the linkages to their past and future are emphasized in this course.

PHH 3700 American Philosophy (5)
This course will examine the development of American philosophical thought, with particular attention to the 19th and 20th centuries. It will consider the traditions and initiatives of the prominent American philosophers, in the light of problems such as the relationship between theory and practice.

PHH 3840 Indian Thought (5)
Major schools and works will be examined showing the development of Indian thought, from Hinduism through Buddhism. Emphasis will be placed on metaphysical and epistemological problems in Buddhism. Some historical relationships between the basic values of Buddhism and the diverse cultural, social and political forms in which they have been expressed will also be studied.

PHH 4600 Twentieth Century Philosophy (5)
The basic concerns and teachings of representative philosophers and schools of thought in the cultural settings of the present century, and linkages to past and emerging generations are emphasized in this course.

PHI 3010 Introduction to Philosophical Thinking (5)
This introductory course examines the presence of philosophy and the role of philosophizing in man's search for understanding of himself and of his world. It includes the study of the basic structure, the many applications, and some basic issues of philosophical thinking, through a dialogue with those original sources, more accessible for a first learning experience in philosophy, which represent basic events in the history of philosophizing.

PHI 3100 Logic and Problem Solving (5)
This introductory course in logical thinking and argumentation will treat both practical and theoretical approaches to understanding human communications and solving problems. Students will be introduced to inductive and deductive logic, fallacies, and the role of logic in scientific explanation and popular expression.

PHI 3300 Epistemology (5)
The viewpoints of various philosophers and schools of thought regarding types of knowledge, certitude, and creativity are the main emphasis of this introductory course. The meaning of truth and truthfulness is analyzed from both the classical and the contemporary perspectives.

(Continued)

Philosophy and Religious Studies

PHI 3320 Philosophy of Mind (5)
An inquiry into the concept of mind and subsidiary concepts such as sensation, perception, desire, emotion, intention, volition, imagination, and intellect. The course will address the problem of the relation of mind and body and such topics as the concept of a person, the nature of intentional action, and the nature of consciousness.

PHI 3400 Philosophies of Science (5)
The philosophic background of scientific method will be examined. Attention will be given to the philosophical consequences of conceptual change in the sciences. Such topics as the growth and unity of science, explanation and prediction, and the role of science in society will be explored.

PHI 3500 What Is Reality? (5)
This introductory course examines basic metaphysical questions regarding the nature of reality, as well as the meaning of these questions for man's concept of himself and his world. Fundamental texts from classical and contemporary philosophers will be considered.

PHI 3630 Ethics (5)
The nature and principles of ethical knowledge are examined in this introductory course. Questions such as "What is intrinsically good?", "What ought one to do?", and "How are ethical statements justified?" will be investigated by considering readings from Aristotle, Augustine, Mill, Hobbes, and Kant.

PHI 3700 Philosophy of Religion (5)
This course will involve a study of the phenomena of religion, as a means of identifying and evaluating religion's essential and universal element. Consideration will also be given to the relations between the enterprises of philosophy and religion. The result of these investigations will then be applied to specific topics examined by both disciplines.

PHI 3762 Eastern Philosophical and Religious Thought (5)
This introductory course examines the development of philosophical and religious thought in the East, from ancient to modern times. Hinduism, Buddhism, Confucianism, Taoism and other major viewpoints will be considered, in themselves and in comparison with Western forms of thought.

PHI 3800 Aesthetics (5)
An introduction to problems in aesthetics, with emphasis on those problems which are especially relevant to appreciation and criticism in the arts. Typical problems include the relation between form and content, truth and falsity in art, the nature of emotion in art and of the aesthetic response, as well as the nature of art itself. This course will include a study of selections from the writings of major thinkers and the consideration of those works of art which are relevant to this study.

PHI 4133 Symbolic Logic (5)
The emphasis of this course is on the theoretical properties of logical systems, rather than on their use. The student will be introduced to a selection of advanced logical topics, including some of the chief results of modern logic (e.g. completeness of quantification logic). Prerequisite: An introduction to logic, such as PHI 3100.

PHI 4221 Philosophy of Language (5)
This course examines the phenomenon of language as an integral part of human culture and as the way of human encounter. It includes contemporary structural and phenomenological analysis of the meaning of language, the power and limitations of speech, the relationship between thought and language, the non-rational thought process and its influence upon rational thought, and language and the power and magic of the word.

PHI 4222 Philosophy of Dialogue (5)
This course examines the meaning, the foundations, the limitations of dialogue, and the dialogical structure of expression and human relationships based on the Philosophy of Martin Buber. It includes a philosophical analysis of the dialogical principle and the application of its insights to the problems of human living and knowing.

PHI 4630 Contemporary Ethical Issues (5)
After a review of basic questions regarding ethics, this course considers special ethical problems in contemporary society from the perspective of one or more philosophers or systems of ethics. Topics will be selected and announced in advance.

PHI 4631 Ethical Issues in Business (5)
After a review of basic questions regarding ethical knowledge, norms and systems, students will consider the ethical dimensions of current problems and issues facing the business manager or worker: corporate decisions, personal responsibility, product quality and performance, production, marketing and advertising, management, and general economic rationality.

PHI 4632 Ethical Issues in Politics (5)
After a review of basic questions regarding ethics, politics, and their relationship, students will consider with historical perspective some fundamental currents and alternatives in the field of political ethics, and then will examine the ethical dimension of some contemporary issues facing the citizen, the public servant and the political leader, such as credibility, technocracy, conflict of interest, and violence.

PHI 4633 Biomedical Ethics (5)
After examining the foundations of ethics, this course will consider the human and ethical dimensions of current issues in the life sciences, such as the meaning of human living and suffering, ethics of genetic control, death and dying, personal responsibility in the medical and counseling professions.

PHI 4680 What Is Value? (5)
Several questions will be examined in this course in the context of classical and contemporary value theories. What is value? How are values known? What are the determinants of value? How do values differ from beliefs and attitudes? Are values relative?

PHI 4882 Philosophy in Literature (5)
This course will examine modern philosophical currents as seen in the works of pertinent literary figures, such as Tolstoy, Dostoevsky, Conrad, Kafka, Koestler, Camus and Mann. Certain basic themes resulting from the merging of aesthetic value and philosophic reflection will be examined: the self, alienation, history, the absurd, time and death.

PHI 4910 Independent Research (VAR)
Topics will be selected to meet the academic needs of the individual student.

PHI 4935 Philosophy Seminar (5)
This seminar is designed for majors and other qualified students approved by the Department, and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.

PHI 5934 Special Topics (5)
Topics will be selected to meet the academic needs of groups of students.

PHM 3040 Philosophical Anthropology (5)
This course attempts to interpret philosophically scientific perspectives concerning the nature of man and of the human condition. It seeks to elucidate the basic qualities that make man what he is and distinguish him from other beings.

PHM 3200 Social and Political Philosophy (5)
After an introduction to the various dimensions of social philosophy, in its relationship to other philosophical disciplines, to the social sciences, and to social ideologies; this course will examine some of the fundamental questions raised by human experience regarding the origins, purposes, and types of society. The readings will be chosen from the works of contrasting major social thinkers.

(Continued)

Philosophy and Religious Studies

PHM 3500 Philosophy of History (5)
After exploring the definitions, dimensions and interrelations of philosophy and history, students will examine major philosophies of history. The social responsibility of the historical narrative and the philosophical assumptions of historiographies will be discussed.

PHM 4020 Love and Sexuality (5)
This course examines the different philosophical approaches to love and sexuality, and studies the basic problems in human sexual living, such as love and the man-woman relationship, the formation of sexual union, and attitudes toward love and sexuality in contemporary society.

PHM 4050 Philosophy of Death (5)(S)
This course analyzes the meaning of death and man's attitude towards death and the dying. It examines how philosophy can share in the new confrontation between man and his death, and shows the ways philosophical thinking contributes to the discovery of an authentic attitude towards the phenomenon of death as part of human living.

PHM 4203 Contemporary Social and Political Issues (5)
This course will examine the dimensions of change and order in contemporary societies, developed and underdeveloped, with particular attention to the human values involved, in the light of different philosophical theories and socio-political ideologies.

PHM 4400 Philosophy of Law (5)
After an analysis of the nature of law and judicial reasoning in the light of fundamental alternative interpretations, basic topics of legal philosophy will be considered, such as freedom and rights, responsibility and punishment, rule of law and civil disobedience, legality and justice.

PHP 3840 Chinese and Japanese Philosophy (5)
This course will examine the main currents of Chinese and Japanese thought, with special focus on the quest of the Chinese people toward a more harmonious adjustment to their environment. The investigation will include consideration of the Confucian, Mohist, Taohist, Legalist and Zen Buddhist philosophies.

PHP 4510 Marxism (5)
This course examines the philosophic insights of Marx and the main trends (anthropological, social, existential) in contemporary Marxism. It includes an analysis of the Marxist interpretation of alienation, work, and human authenticity.

PHP 4782 Phenomenology (5)
This course analyzes the methods, the basic philosophical insights and the applications of 20th century Phenomenology. It includes the phenomenological analysis of knowing as well as basic questions regarding the nature of reality together with the study of fundamental texts from Husserl, Heidegger and Merleau-Ponty.

PHP 4784 Analytic Philosophy (5)
This course examines the 20th century Anglo-American tradition of approaching philosophic problems by the methods of linguistic analysis. It will include study of techniques of linguistic analysis and an evaluation of their adequacy in dealing with meaning and truth, the mind-body problem, and free will.

PHP 4786 Existentialism (5)
This course examines the origin, basic philosophical insights, and influence of the mainstreams of modern existentialism. It includes the study of fundamental texts of Kierkegaard, Nietzsche, Sartre, Jaspers and Camus.

PHR 3949 Cooperative Education in Philosophy/Religion (5)
A student majoring in Philosophy or Religion may spend several quarters fully employed in industry or government in a capacity relating to the major. Permission of Cooperative Education and Major Department.

PHR 4949 Cooperative Education in Philosophy/Religion (5)
A student majoring in Philosophy or Religion may spend several quarters fully employed in industry or government in a capacity relating to the major. Permission of Cooperative Education and Major Department.

Religious Studies Major

Definition of Prefixes
REL–Religion.

REL 3030 Introduction to Religious Inquiry (5)
This course examines the various ways used by religious individuals and communities as they seek to understand themselves and their relation to the world. It will address such questions as the relation among faith, revelation, and reason; the knowledge and existence of God as the sacred; and the encounter of the believer and non-believer.

REL 3040 Introduction to Religion (5)
A survey of the basic elements in the phenomenon of religion. Discussion will include myth and symbol, ritual, mysticism and other forms of religious experience, the sacred, and religious community.

REL 3100 Religion and Culture (5)
This course will explore both the ways religion uses culture to express its basic concerns and the ways that culture and lifestyle reflect religious perspectives. Attention will be given to traditional and popular expressions of culture.

REL 3118 Art, Literature, and Religion (5)
The presupposition of this course is that the deepest religious instincts of humankind have, through the ages, found expression in its cultural creations. Selected art and literary texts will be examined to see how these reflect an encounter with the sacred or with the particular religious problems of an age.

REL 3172 Religion and Ethics (5)
This course will examine the nature of ethics in its relationship to faith orientation. After considering the various religious foundations of ethics in the thought of influential ethical thinkers, attention will be given to the application of these perspectives to pressing ethical problems in contemporary society.

REL 3210 The Hebrew Bible (5)
An introductory survey of the Old Testament from the points of view of historical background, the cultures in which the works were written, and the ideas they contain. Emphasis will be given to the relevance of biblical themes for the contemporary situation.

REL 3224 The Prophets (5)
What is a prophet? This course will attempt to answer this question both in terms of the classic Hebrew prophets, whose acts and words are preserved in the Old Testament, and the nature of the prophetic vocation in the contemporary world.

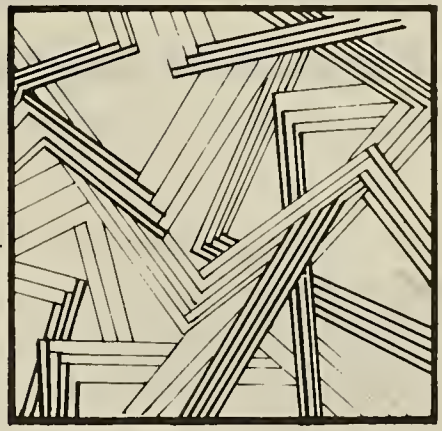
REL 3250 The New Testament (5)
This course is a study of the life of Jesus through an examination of his acts and words as recorded by his contemporaries in the New Testament. Attention will also be given to the interpretation of Jesus' message by theologians and others as they seek to relate him to the modern world.

REL 3252 Theology of Paul (5)
This course will survey the life and times of Paul as a prelude to an in-depth study of this primary Christian thinker. Attention will be given both to the sources of his thought and to its contemporary relevance.

REL 3270 Biblical Theology (VAR)
This course will examine the thought and heritage of the Bible, especially as it discloses the history of the Hebrew people, the role of the prophets, the life and times of Jesus, and the thought of Paul. Major themes will be related to modern movements in Judaism and Christianity.

(Continued)

Physical Sciences
Chemistry



REL 3310 Religions of the East (5)
An in-depth survey of the major religious traditions of India, China, Japan, and South Asia including Hinduism, Buddhism, Jainism, Sikhism, Taoism, Confucianism, and Shinto.

REL 3300 Religions of the World (5)
Introduction to the major faiths of mankind. Included in the discussion will be Hinduism, Buddhism, Taoism, Judaism, and Christianity. This course will involve a comparison of common elements in these major religions while respecting their distinctive features.

REL 3411 Meaning of Life (5)
This introductory course examines the convergent and divergent views of philosophies and religions regarding the meaning of life. Special emphasis is given to the variety of strategies available to the individual in the personal search for such meaning.

REL 3460 Religion, Science, and Technology (5)
The methods, assumptions, and goals of religion will be considered alongside those of science and technology in this comparative examination of several important ways humankind seeks to discover ultimate meaning in order to understand and transform itself.

REL 3510 Early Christianity (5)
This course will survey the development of Christian thought and practice from its beginnings as a primitive church to its establishment as a major faith in the Middle Ages. It will then consider the relevance of this early experience for modern movements of this faith.

REL 3532 Reformation (5)
The lives and thoughts of the leaders of the Protestant Reformation will be the focus of this course. Significant attention will be given to the perennial personal experiences and theological perspectives which directed the actions of such persons as Luther, Calvin, and Zwingli, as well as the movements they founded.

REL 3600 Judaism (5)
This course is an introduction to this major world religion. Following a survey of the history of Judaism, major themes in Jewish religious thought will be highlighted, especially as they relate to modern movements of this faith.

REL 4117 Issues in Art, Literature and Religion (5)
This course, working on the same presuppositions as REL 3110, will look to particular religious issues that have found reflection in cultural creations, e.g., the problems of evil and suffering in modern literature; the artist and the struggle with faith.

REL 4173 Technology and Human Values (5)
This course will explore the sources and impact of modern technology from philosophical and religious perspectives. Topics to be discussed include the effects of technology upon the understanding of human nature; and the relationship among technology, the natural environment, and hopes for a livable human future.

REL 4182 Mysticism East and West (5)
A comparative study of mystical practice and experience as found in the writings of select major mystics of Eastern and Western traditions. An attempt will be made to discover if or in what ways the mysticism of the East is similar to that of the West.

REL 4311 Oriental Meditation (5)
A detailed examination of the various techniques of meditation found in Eastern religious traditions. This examination will be pursued on both the theoretical and practical levels with major emphasis on class participation in the techniques themselves.

REL 4410 Issues in Religious Thought (5)
Attention will be concentrated on one or possibly two major issues on the boundary between religion and philosophy. Possible topics for examination would be the nature of God, the problems of evil, faith and knowing, religious language, and the nature of man in religion.

REL 4420 Contemporary Judaic-Christian Religious Thought (5)
A survey of major figures in contemporary Jewish and Christian theology for the purpose of understanding their thought and its application to current issues in religion and society.

REL 4440 Man and Nature (5)
This course will explore resources from philosophy and religion that could contribute to a solution of the current environmental crisis. Ethical issues of the environment will especially be examined in the light of these resources.

REL 4463 Issues in Religion and Science (5)
An examination of the relationships between the perspectives of religion and science and the consequences of these relationships for our time. A different major topic will be selected and announced each time the course is offered.

REL 4481 Contemporary Latin American Religious Thought (5)
The major trends of religious thought in Latin America and their impact on the society of the area will be investigated. Special reference will be made to Post-Vatican II theology and to very recent theologies of liberation.

REL 4493 Religion and Modern Man (VAR)
An examination of relevant issues in religion concerning modern man. Behavioral as well as conceptual expressions are analyzed.

REL 4808 Applied Theology (VAR)
The study of contemporary problems and methodologies of pastoral theology in a practical-theoretical context.

REL 4910 Independent Research (VAR)
Topics will be selected to meet the academic needs of the individual student.

REL 4931 Religious Studies Seminar (5)
This seminar is designed for majors and other qualified students approved by the Department and will be guided by one or more faculty members. The specific topic will be selected and announced in advance. The number of participants will be limited.

REL 5937 Special Topics (5)
Topics will be selected to meet the academic needs of groups of students.

The Department of Philosophy and Religion also participates in the Continuing Education Program of the University and thus serves the community and professional groups by offering several courses off-campus. For further information concerning these courses (e.g. credit hours, courses not listed in the catalog) consult the Department.

Department of Physical Sciences
Chemistry, Earth Sciences, Environmental Studies, Physics

Howard E. Moore, *Professor and Chairperson (Chemistry)*
John W. Shelton, *Professor (Chemical Physics)*
Kenneth A. Hardy, *Associate Professor (Physics)*
Arthur W. Herriott, *Associate Professor (Chemistry)*
Florentin J.–M.R. Maurrasse, *Associate Professor (Geology)*
Stephan L. Mintz, *Associate Professor (Physics)*
John H. Parker, *Associate Professor (Chemistry and Environmental Science)*

Physical Sciences
Chemistry

Kathryn R. Williams. *Associate Professor (Chemistry)*
Grenville Draper. *Assistant Professor (Geology)*
Zaida C. Martinez. *Instructor (Chemistry)*
Paul A. Edwards. *Visiting Assistant Professor (Chemistry)*

Chemistry

The student may choose a *Bachelor of Arts* program or a *Bachelor of Science* program of study in Chemistry.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

This program is for students preparing for careers in medicine, dentistry, environmental studies, veterinary medicine, or secondary science education. (Students interested in teacher certification refer to the School of Education, page 2.)

LOWER DIVISION PREPARATION:

Required Courses: one year of general chemistry with lab; one year of general biology with lab; algebra and trigonometry. (Advanced high school courses in algebra and trigonometry are acceptable.)

LOWER OR UPPER DIVISION PREPARATION:

Required courses which may be taken at the University: MAC 3411-MAC 3412 Differential and Integral Calculus; CHM 3210, 3210L-CHM 3211, 3211L Organic Chemistry I-II with lab; PHY 3040C-PHY 3041C-PHY 3042C Physics with Calculus or PHY 3050C-PHY 3051C Physics without Calculus.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses:		26
CHM 4220	Advanced Organic Chemistry	5
CHM 4230L	Organic Structure Determination	2
or		
CHM 4320L	Research Techniques in Organic Chemistry	2
CHM 3400	Physical Chemistry for Life Sciences	5
CHM 3400L	Physical Chemistry for the Life Sciences Laboratory	2
CHM 3120	Quantitative Analysis	5
CHM 3120L	Quantitative Analysis Laboratory	2
	One additional chemistry course	5
Electives:		64
		90

OR

DEGREE: *Bachelor of Science*

This program prepares the student for graduate study or a professional career as a chemist in industry, in government service, or in secondary school teaching.

LOWER DIVISION PREPARATION:

Required Courses: One year of general chemistry with lab; algebra and trigonometry. (Advanced high school courses in algebra and trigonometry are acceptable.)

LOWER OR UPPER DIVISION PREPARATION:

Required courses which may be taken at the University: MAC 3411-MAC 3412 Differential and Integral Calculus; CHM 3210, 3210L-CHM 3211, 3211L Organic Chemistry I-II with lab; PHY 3040C, PHY 3041C, PHY 3042C Physics with Calculus.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses:		61
CHM 4220	Advanced Organic Chemistry	5
CHM 4230L	Organic Structure Determination	2
or		
CHM 4320L	Research Techniques in Organic Chemistry	2
CHM 3410	Physical Chemistry I—Thermodynamics	5
CHM 3411	Physical Chemistry II—Equilibrium and Properties of Solutions	5
CHM 3412	Physical Chemistry III—Quantum Mechanics	5
CHM 3410L-CHM 3411L-CHM 3412L	Physical Chemistry Laboratory I-II-III	2–2–1
CHM 3120	Quantitative Analysis	5
CHM 3120L	Quantitative Analysis Laboratory	2
CHM 4130	Modern Analytical Chemistry	5
CHM 4130L	Modern Analytical Chemistry Laboratory	2
CHM 4610	Advanced Inorganic Chemistry	5
CHM 4930	Senior Seminar	1
CHM 4910L, 4911L and/or 4912L	Research and Independent Study in Chemistry	4
One additional senior-level chemistry course		5
Other Required Courses: at least *one* of the following:		
MAP 3302	Differential Equations	5
MAP 4401	Math Methods in the Physical Sciences	5
COP 3112	Introduction to Computers I	5
Electives:		29
		90

Remarks: No *D* grades will be allowed in courses required for the major. This rule includes required courses outside the discipline.

Minor in Chemistry:

		Quarter Hours
Required Courses:		35
CHM 3045, 3045L-CHM 3046, 3046L	General Chemistry with Laboratory	14
CHM 3210, 3210L-CHM 3211, 3211L	Organic Chemistry with Laboratory	14
CHM 3120, 3120L	Quantitative Analysis with Laboratory	7
		35

Criminalistics-Chemistry Program

Criminalistics-Chemistry Core Requirements: Same as requirements for bachelor's degree in Chemistry. (Degree granted by Department of Physical Sciences.)

Chemistry Electives:

If the student chooses the BA degree in Chemistry, he/she should elect at least one of the following:

CHM 4490	Spectroscopy and Molecular Structure	5
CHM 4130, 4130L	Modern Analytical Chemistry with lab	7

Internship:

A 5–10 credit internship in the laboratory of a participating criminal justice agency.

Criminal Justice Coursework:

The student should elect 15 credits of criminal justice courses in consultation with an advisor in the Department of Criminal Justice.

Electives:

Coursework in the behavioral and political sciences, as well as upper division coursework in the biological sciences, is recommended to total 90 quarter hours.

Master of Science in Chemistry

The Department of Physical Sciences at Florida International University participates jointly

(Continued)

Physical Sciences
Chemistry

with the Department of Chemistry at Florida Atlantic University in offering the M.S. in Chemistry. Students entering the program must have a B.S. (or equivalent) and must satisfy the requirements for admission to the FAU master's program. Students may take a substantial part of their course work at FIU and may undertake their research under the supervision of an FIU faculty member. Two Florida International University faculty members serve on each student's advisory committee. The degree is awarded by Florida Atlantic University. Students in the program must satisfy the FAU requirements for the M.S. in Chemistry.

Cooperative Education

Students seeking the baccalaureate degree in Chemistry may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends several quarters fully employed in an industrial or governmental chemistry laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

Course Descriptions

Definition of Prefixes
CHM–Chemistry; CHS–Chemistry-Specialized; ISC–Interdisciplinary Natural Science.

CHM 3030 Survey of General Chemistry (5)(F,S)
A basic one-quarter survey course in inorganic chemistry for nonmajors. Topics include atomic structure, stoichiometry, bonding, equilibrium, electrochemistry. Does not fulfill requirements for chemistry, biology, or pre-med majors. Familiarity with algebraic manipulations is required. Must be taken concurrently with CHM 3030L.

CHM 3030L Survey of General Chemistry (2)(F,S)
Laboratory to accompany CHM 3030. Basic laboratory techniques are introduced. Must be taken concurrently with CHM 3030.

CHM 3045–CHM 3046 General Chemistry I-II (5–5)(F,W,S,SS)
Fundamental principles of modern chemistry: atomic structure, stoichiometry, chemical bonding, states of matter, thermodynamics, solutions, kinetics, equilibrium, electrochemistry. This course is primarily designed for the student who feels that his/her background in general chemistry is somewhat weak and who would like to go on to organic chemistry or more advanced biology courses. Familiarity with algebraic manipulations is required. Should be accompanied by CHM 3045L–3046L.

CHM 3045L–CHM 3046L General Chemistry Laboratory I-II (2–2)(F,W,S,SS)
Laboratory to accompany CHM 3045–3046. Basic laboratory techniques are introduced and experiments performed on material relating to CHM 3045–3046.

CHM 3120 Quantitative Analysis (5)(W,S,SS)
Fundamentals of classical quantitative analysis. Topics include theory of precipitation, acid-base, and oxidation-reduction reactions, as well as an introduction to spectrophotometric methods of analysis, ion-exchange techniques and complex formation titrations. Must be taken concurrently with CHM 3120L. Prerequisites: CHM 3045,3045L–CHM 3046,3046L.

CHM 3120L Quantitative Analysis Laboratory (2)(W,S,SS)
Laboratory to accompany CHM 3120. Must be taken concurrently with CHM 3120.

CHM 3200 Survey of Organic Chemistry (5)(W)
A basic one-quarter survey course in organic chemistry for nonmajors presenting a broad background in the reactions and structures of organic molecules. Does not fulfill requirements for chemistry, biology, or pre-med major. Must be taken concurrently with CHM 3200L. Prerequisite: general chemistry.

CHM 3200L Survey of Organic Chemistry Laboratory (2)(W)
An introduction to the basic experimental techniques of organic chemistry. Corequisite: CHM 3200.

CHM 3210 Organic Chemistry I (5)(F,S)
An introduction to chemical bonding and atomic structure theory as it pertains to the chemistry of carbon compounds. Correlation between structure and reactivity of organic molecules followed by a systematic look at the various reaction types using reaction mechanisms as a tool for study. Prerequisite: general chemistry.

CHM 3210L Organic Chemistry Laboratory I (2)(F,S)
An introduction to the basic experimental techniques of the organic chemist. Corequisite: CHM 3210.

CHM 3211 Organic Chemistry II (5)(W,SS)
Continuation of CHM 3210.

CHM 3211L Organic Chemistry Laboratory II (2)(W,SS)
Synthesis and qualitative analysis of organic compounds. Corequisite: CHM 3211. Prerequisite: CHM 3210,3210L.

CHM 3400 Physical Chemistry for the Life Sciences (5)(S)
Principles of physical chemistry with particular reference to the life sciences. Topics include thermodynamics, equilibria, electrochemistry, and reaction kinetics. Prerequisites: differential and integral calculus and general physics. A background in quantitative analysis is also helpful.

CHM 3400L Physical Chemistry for the Life Sciences Laboratory (2)(S)
Projects in physical properties of solutions, equilibrium, reaction kinetics and equations of state of interest to students in life sciences. Must be taken concurrently with CHM 3400.

CHM 3410/PHY 3503 Physical Chemistry I–Thermodynamics (5)(F)
Fundamental principles of thermodynamics; the first, second, and third laws, free energy, entropy, in addition to the chemical potential, phase rule and its applications, concepts of activation energy. The first in a three-quarter physical chemistry sequence. Prerequisites: general chemistry, mathematics through Calculus II, and general physics with calculus.

CHM 3410L Physical Chemistry Laboratory I (2)(F)
Equation of state, thermochemical phase equilibrium experiments. Some use of a computer for data analysis. Must be taken concurrently with CHM 3410.

CHM 3411 Physical Chemistry II-Equilibrium, Kinetics and Properties of Solutions (5)(W)
The second in the series of physical chemistry courses: equilibrium, the relationship of the equilibrium constant to the chemical potential, catalyzed reactions, colligative properties of solutions, osmotic pressure, dipole moments and conductivity. Prerequisite: CHM 3410.

CHM 3411L Physical Chemistry Laboratory II (2)(W)
Equilibrium colligative properties, transport reaction rate, electromotive force and conductivity experiments. Must be taken concurrently with CHM 3411.

CHM 3412/PHY 4604 Physical Chemistry III–Quantum Mechanics (5)(S)
The third in the physical chemistry series: simple quantum mechanical calculations, solutions to the Schroedinger wave equations, simple harmonic oscillator, particle in a square well, the hydrogen atom, structure of atomic and molecular orbitals. Prerequisites: general chemistry, general physics with calculus and mathematics

(Continued)

Physical Sciences
Chemistry

through Calculus II. Multivariable calculus or differential equations recommended.

CHM 3412L Physical Chemistry Laboratory III (1)(S)
Relationship of spectra to atomic, crystal, and molecular structure. Must be taken concurrently with CHM 3412.

CHM 3949-CHM 4949 Cooperative Education in Physical Sciences (5)(F,W,S,SS)
One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation will be required of each student.

CHM 4090L Introduction to Scientific Glassblowing (2)(F)
Basic glassblowing operations with glass tubing and rod are taught. Emphasis is on making and repair of scientific glassware.

CHM 4130 Modern Analytical Chemistry (5)(W)
Instrumental methods of chemical analysis, including electroanalytical methods, gas and liquid chromatography, mass spectrometry, x-ray fluorescence, and spectrophotometric methods. Prerequisites: Quantitative analysis, organic chemistry, and general physics.

CHM 4130L Modern Analytical Chemistry Laboratory (2)(W)
Laboratory to accompany CHM 4130. Pre- or co-requisite: CHM 4130.

CHM 4180 Special Topics in Analytical Chemistry (VAR)
An intensive examination of one or more areas selected by instructor and students.

CHM 4220 Advanced Organic Chemistry (5)(F,S)
An intensive examination of the major areas of contemporary organic chemistry. Reactive intermediates, pericyclic reactions, molecular rearrangements, and modern synthetic methods are among the topics investigated. Should be accompanied by a laboratory: CHM 4230L or CHM 4320L.

CHM 4230L Organic Structure Determination (2)(F,S)
The qualitative analysis of organic compounds using modern spectroscopic and chemical methods. Prerequisites: CHM 3210, 3210L-CHM 3211, 3211L.

CHM 4300 Bio-organic Chemistry (5)(S)
Chemistry of naturally occurring organic compounds of biological importance. The relationship between organic chemistry and the chemical reactions which constitute the living organism.

CHM 4310 Special Topics in Organic Chemistry (VAR)(F)
An intensive examination of one or more areas selected by instructor and students.

CHM 4320L Research Techniques in Organic Chemistry (2)(F,S)
Practical instruction in the more advanced manipulations and procedures of the modern organic laboratory. This course is designed to prepare a student for research in organic chemistry and is a prerequisite for independent study (CHM 4910L, 4911L, 4912L) in organic chemistry. Prerequisites: CHM 3210, 3210L-CHM 3211, 3211L.

CHM 4460/PHY 4526 Statistical Thermodynamics (5)(F)
Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: General chemistry, general physics with calculus and mathematics through Calculus II.

CHM 4490 Spectroscopy and Molecular Structure (5)(W)
Molecular structure and its relationship to spectroscopy. Introduction to theory and practical use of uv/visible, infrared, nmr, and mass spectroscopy. For accompanying laboratory, see CHM 4230L. Prerequisite: Competency in organic chemistry is required. Physical chemistry is recommended.

CHM 4580 Special Topics in Physical Chemistry (VAR)(W)
An intensive examination of one or more areas selected by the instructor and students.

CHM 4610 Advanced Inorganic Chemistry (5)(F)
Atomic structure, periodicity, bonding and structure of inorganic compounds, solution chemistry, ligand field theory, organometallic chemistry, and specific chemistry of the elements. Prerequisites: General chemistry, organic chemistry, and general physics. Physical chemistry is recommended.

CHM 4680 Special Topics in Inorganic Chemistry (VAR)(S)
An intensive examination of one or more areas selected by instructor and students.

CHM 4910–CHM 4911–CHM 4912 Research and Independent Study in Chemistry (VAR)(F,W,S,SS)
The student works directly with a professor on a research project. It is anticipated that the student present the results of the project as a seminar (see CHM 4930). Credit is assigned on the basis of 4 hr/wk of laboratory/library work per 1 hr of credit. It is recommended that the 4 credits required of all BS chemistry majors be taken over 2 quarters. A written report is required.

CHM 4930 Senior Seminar (1)(F,W,S)
Each student will make an oral presentation to faculty and other students enrolled in the seminar course. The subject of the seminar may be either a report of results of an independent study project or a survey of the recent literature on an assigned topic.

CHM 5181 Special Topics in Analytical Chemistry (VAR)
An intensive examination of one or more areas selected by instructor and students.

CHM 5250 Organic Synthesis (5)
Use of classical and modern reactions in the design and construction of complex organic molecules, including natural products. Some topics covered will be construction reactions, refunctionalization, stereochemistry and conformational analysis.

CHM 5260 Physical Organic Chemistry (5)
A series of topics will be discussed including molecular orbital theory as it pertains to organic molecules, kinetic and thermodynamic approaches to the study of reaction mechanisms, quantitative approaches to conformational analysis, etc.

CHM 5280 Natural Products Chemistry and Biosynthesis (5)
Studies of the chemical origins (biosynthesis), properties, and synthesis of the various classes of naturally occurring compounds: terpenes, steroids, alkaloids, acetogenins.

CHM 5380 Special Topics in Organic Chemistry (VAR)
An intensive examination of one or more areas selected by instructor and students.

CHM 5440 Kinetics and Catalysis (5)
Theory of elementary reactions, activated complex theory, mechanisms of complex reactions. Prerequisites: CHM 3411 and differential equations.

CHM 5517/PHS 5400 Solid State (5)
Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisites: General chemistry.

(Continued)

Physical Sciences
Earth Sciences

general physics with calculus, and mathematics through Calculus II.

CHM 5581 Special Topics in Physical Chemistry (VAR)
An intensive examination of one or more areas selected by instructor and students.

CHM 5650 Physical Inorganic Chemistry (5)
Introduction to use of physical methods to determine structure of inorganic compounds.

CHM 5681 Special Topics in Inorganic Chemistry (VAR)
An intensive examination of one or more areas selected by instructor and students.

CHS 4100L Radiochemical Techniques Laboratory (2)(SS)
Experiments involving handling, detection, chemical separation and use of radioisotopes. Students must have concurrent enrollment in either CHM 4100 or EVR 5141.

CHS 4100 Radiochemistry (5)(SS)
Production, isolation, methods of detection, counting statistics and estimation of radioisotopes. Applications to chemical, physical and biological problems. Prerequisites: CHM 3045–3046, CHM 3120, 3120L and mathematics through Calculus II.

ISC 4041 Scientific Literature (2)(W)
This course presents a perspective on the scientific literature and scientific documentation. Problems in using and searching the scientific literature will be specifically designed to meet the needs of various disciplines, e.g. chemistry, environmental science, physics, biology. Prerequisites: 20 quarter hours of science.

Earth Sciences

This program is interdisciplinary in nature and provides the background the student will need in professional work or graduate study. While thoroughly preparing the student in the basic sciences, the program also provides a sound knowledge of Caribbean earth sciences. Student and faculty exchanges will be promoted with counterparts in the Caribbean. The student may choose either a *Bachelor of Arts* program or a *Bachelor of Science* program in earth sciences.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Arts*

This program is for the student who desires a significant background in the earth sciences for a career in science education, or in a public or private agency dealing with problems in the framework of the earth sciences.

LOWER DIVISION PREPARATION:

Required Courses: general biology, physical geology or the equivalent; college algebra, trigonometry, and analytical geometry; general physics; general chemistry.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses:		35
AST 3100	Modern Astronomy	5
MET 4701	Meteorology	5
GLY 4650	Paleobiology	5
GEO 3200	Physical Geography	5
OCE 3014	Physical Oceanography	5
EVS 4164	Applied Environmental Geology	5
or		
EVR 4211	Water Resources	5
OCB 3010	Biological Oceanography	5
Possible Natural Science Electives:		10
PCB 3043	Fundamentals of Ecology	5
GLY 4791	Cartography and Geologic Surveying	3
AST 3025L	Observational Astronomy	2
Social Science Electives:		45
ANT 4340	Cultures of the Caribbean	5
ECS 4433	Economics of the Caribbean	5
ECS 5025	Economic Problems of Emerging Nations	5
CPO 3323	Government and Politics of the Caribbean	5
CPO 4327	Topics in Caribbean Politics	5
		90

OR

LOCATION: Tamiami Campus Only

DEGREE: *Bachelor of Science*

This program provides a thorough scientific understanding of the basic sciences required for graduate study or a career in earth, marine, or atmospheric sciences.

LOWER DIVISION PREPARATION:

Required Courses: 4 semester hours of general biology; 4 semester hours of physical geology or the equivalent; 4 semester hours of historical geology; mathematics (Calculus I and II); 15 quarter hours or the equivalent, including laboratory, of general physics; 14 quarter hours or the equivalent, including laboratory, of general chemistry.

Remarks: The mathematics, physics, and chemistry requirements may be taken at the University.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses: a minimum of 55 quarter hours of earth science courses is required including at least 35 quarter hours of the following courses marked with an asterisk:		55
AST 3100	Modern Astronomy	5
GEO 3200C	Physical Geography*	5
GLY 3322	Optical Mineralogy*	5
OCE 3014	Physical Oceanography*	5
MET 4701	Meteorology	5
GLY 4450	Geophysics	5
GLY 4315	Igneous and Metamorphic Petrology*	5
GLY 4401	Structural Geology*	5
GLY 4650	Paleobiology*	5
GLY 4555	Sedimentology*	5
Other Required Courses:		10
GLY 4910	Independent Study	5
GLY 4791	Cartography and Geologic Surveying or the equivalent	5
Electives: select courses to meet particular professional goals. Suggestions:		27
Natural Sciences:		
OCB 3010	Biological Oceanography	5
PCB 3043	Fundamentals of Ecology	5
OCB 5635	Marine Ecology	5
EVR 4211	Water Resources	5
EVR 4311	Energy Resources	5
Social Sciences:		
ANT 4340	Cultures of the Caribbean	5
ECS 4433	Economics of the Caribbean	5
ECS 5025	Economic Problems of Emerging Nations	5
CPO 3323	Government and Politics of the Caribbean	5
CPO 4327	Topics in Caribbean Politics	5
		90

Remarks: A grade of C or better in all courses required for the major is necessary for graduation.

(Continued)

Physical Sciences
Earth Sciences

Minor in Earth Sciences:
Required Courses: 30 quarter hours minimum; the following courses are recommended:

GLY 3106	Environmental Earth Science	5
GLY 3157	Elements of Caribbean Geology	5
AST 3100	Modern Astronomy	5
GEO 3200	Physical Geography	5
OCE 3014	Physical Oceanography	5
MET 4701	Meteorology	5
GLY 4650	Paleobiology	5
GLY 4791	Cartography and Geologic Surveying	5

Certificate in Caribbean Studies

A student may earn a Certificate in Caribbean Studies by successfully completing the 30 quarter hours of social sciences coursework listed above for the *Bachelor of Science* program in earth sciences, *or* by completing six other Caribbean-related courses from at least two departments.

The social science major student in the Caribbean Certificate Program may elect up to five Caribbean-related earth science courses toward the six courses required for the Certificate.

Recommended Courses: in sequence:

GLY 3157	Elements of Caribbean Geology	5
GLY 4190	Caribbean Earth Sciences Seminar	5
GLY 4792	Caribbean Mineral Resources Field Trip	5

Cooperative Education

Students seeking the baccalaureate degree in Earth Sciences may also take part in the Cooperative Education Program conducted with the Department of Cooperative Education in the Division of Student Affairs. The student spends several quarters fully employed in industry or a government agency. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

Course Descriptions

Definition of Prefixes
AST–Astronomy; EAS–Earth Science, EVS–Environmental Science, GEO–Geography-Systematic; GLY–Geology; ISC–Interdisciplinary Natural Science; MET–Meteorology; OCE–Oceanography; OCG–Oceanography-Geological; OCP–Oceanography-Physical.

AST 3100 Modern Astronomy (5)
The structure and evolution of our solar system is studied, with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motion, and a description of our solar system. Prerequisites: College algebra and geometry.

AST 3213 Modern Astrophysics (5)
An introduction to the structure of stars and galaxies and the evolution of the universe as a whole. Topics will include atomic spectra, stellar classifications, galactic structure, and cosmology. Prerequisites: PHY 3040C–3042C, Calculus I and II and AST 3100.

EVS 4164 Applied Environmental Geology (5)
A survey of the geological and geographical factors critical to man's attempt to contend with natural processes. Construction problems, sewers, waste disposal, dams, ground water, and terrain evaluation in relation to the nature of the underlying substratum. Principles illustrated from South Florida and the Caribbean region in particular. Study of the geologic factors involved in future development and growth of these areas, and conservation methods in relation to the geology of these areas. Prerequisites: GLY 3106, GEO 3200C, and a sound background in mathematics, physics, and chemistry.

EVS 4164L Applied Environmental Geology Laboratory (1)
Analysis of physical and physico-chemical geologic processes. Identification, control, and correction techniques of landslides, rockfall, subsidence, quicksand, piping and flooding hazards. Corequisite: EVS 4164.

GEO 3200 Physical Geography (5)
Survey of the physical environment relevant to studies in regional geography and earth sciences. Natural evolution of landforms, and the interacting processes responsible for these features. Environmental modifications and deteriorations caused by human interaction. Effects of these changes; socio-economic impacts and geographic problems. Case studies illustrated from South Florida and the Caribbean region.

GEO 3122L Physical Geography Lab (1)
The use of maps as means of depicting the earth's morphology. The processes responsible for the landforms, and methods to infer the subsurface structure of the earth's crust. Photogrammetry and use of aerial photographs in land evaluation, mapping and as map supplements. Optional for non-science majors. Corequisite of GEO 3200 for science majors.

GEO 3510 Earth Resources (5)
Distribution of mineral resources, with special emphasis on metallic deposits. Problems of exploitation and depletion on a world-wide scale; environmental, social, economic, and political impacts; international control and trade. One or two field trips to a mining region expected. No prerequisites.

GEO 4114C Dynamic Geography (5)
Theories and techniques used in modern geographic analyses. Simple correlation and regression. Multiple regression. Surfaces and regions, and the analysis of variance. Non parametric statistics. Factorial analysis and spatial allocation models. Examples emphasize aspects of economic, urban, transportation and social geography in South Florida and the Caribbean area. Prerequisites: GEO 3200 and a sound background in mathematics.

GLY 3106 Environmental Earth Sciences (5)
A course for non-science majors and those desiring a cultural understanding of the earth sciences. Origin of the earth. Processes taking place in the earth's lithosphere, hydrosphere, and atmosphere which affect man in his environment. Earthquake prediction, pollution control, weather modification on global scales. No prerequisites.

GLY 3157 Elements of Caribbean Geology (5)
A survey of the geology of the Caribbean and neighboring regions in view of current data and modern concepts of global tectonics. The course summarizes the important points of Caribbean and Central American geology in their relation to mineral and energy resources; natural environmental disasters, especially seismic zones; agriculture; and the geologic potentials for future development and industrialization.

GLY 3215 Mineralogy (5)
Elementary crystallography; fundamentals of crystal chemistry and physical mineralogy. Classification of common economic and rock forming minerals; structure and classification of silicate minerals. Study of geometric and atomic crystal models and principles, and interpretation of x-ray diffraction and fluorescence techniques. Prerequisites: physical geology or equivalent and general chemistry.

GLY 3215L Mineralogy Laboratory (2)
Identification of more than 100 common economic and rock-forming minerals, based on their physical properties. Crystal symmetry, symmetry operations, crystallographic calculations, stereographic projects.

GLY 3322 Optical Mineralogy (5)
Principles and use of the polarizing petrographic microscope. Optical properties of isotropic, uniaxial and biaxial minerals; solution of optical problems by use of stereographic projections. Prerequisites: GLY 3215 or equivalent.

GLY 3322L Optical Mineralogy Laboratory (2)
Identification of nonopaque minerals under the microscope, based on their optical and crystallographic properties, determined from oil immersion/permanent mount methods.

(Continued)

Physical Sciences
Earth Sciences

GLY 3850 Environmental Geology (5)
The composition and structure of the earth, the internal and external forces acting upon it and the resulting surface features. Case studies and general principles illustrated from South Florida and the Caribbean. Two field trips expected. No prerequisites.

GLY 3850L Environmental Geology Laboratory (1)
Study of common rocks and minerals. Study of the various rocks found in South Florida and their environmental importance concerning the availability of fresh ground-water to the region. Study of contour and geologic maps. Optional for non-science majors. Corequisite of GLY 3850 for science majors.

GLY 3949/GLY 4949 Cooperative Education in Earth Science (5,5)
One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required for each student.

GLY 4190 Caribbean Earth Sciences Seminar (5)
Discussion of various topics dealing with geographic and geologic problems involving local, national, and international influence on economic life. Similar discussion will be held on oceanographic problems related to both the aquatic and sea-bed resources. Guest speakers in the earth and social sciences will present lectures pertinent to their respective fields. Prerequisite: GLY 3157, or instructor's permission.

GLY 4240 Geochemistry (5)
Origin of the chemical elements of common rock-forming minerals. Atomic theory, bond theory, lattice types, the interaction of electromagnetic waves and solids. Crystal chemistry of common oxides, sulfides, and rock-forming minerals. Geochemical cycles presently operating in the earth's atmosphere, hydrosphere, and lithosphere. Case studies in the Caribbean. Prerequisites: Chemistry, physics, mathematics, and a sound background in the earth sciences.

GLY 4315 Igneous and Metamorphic Petrology (5)
Genesis, composition, and classification of igneous and metamorphic rocks. Includes studies of experimental solid-liquid phase equilibria and mineral stabilities of silicate systems. Prerequisite: GLY 3322.

GLY 4315L Igneous and Metamorphic Petrology Laboratory (2)
Lab techniques concern the description and identification of igneous and metamorphic rocks in hand specimens and thin sections.

GLY 4401 Structural Geology (5)
Nature and origin of rock structures and deformations, primary structures, geometry and description of folds, faults, minor structures, cleavage, jointing, lineations, polyphase deformation and structural petrology. Topics in geotectonics and global tectonics with special reference to the Caribbean. Prerequisites: physical geology or equivalent, and a sound background in mathematics.

GLY 4401L Structural Geology Laboratory (2)
Interpretation of geologic maps, folds, faults, outcrop patterns, and three points problems. Graphic resolutions with stereographic net and structural analysis.

GLY 4450 Geophysics (5)
A survey of the different principles and methods of measurements of the physical properties of the earth and the moon; seismic, magnetic, electrical, thermal and gravitational. The implications of the results in terms of the earth's structure, composition, evolution and present state. Case studies illustrated from recent geophysical data from the Caribbean area and Central America. Prerequisites: GLY 3106 and OCE 3014.

GLY 4555 Sedimentology (5)
Sedimentary processes in the geological cycles, as illustrated in recent environments. Different groups of sedimentary rocks. Primary and secondary sedimentary structures. Physico-chemical properties and diagenetic processes. Analytical techniques applied to modern sedimentology of both loose and lithified sediments. Prerequisites: Physical Geology or equivalent; Mineralogy; Optical Mineralogy; Paleontology, and a sound background in mathematics and chemistry.

GLY 4555L Sedimentology Laboratory (2)
Mechanical analyses, coloration techniques,and heavy mineral separation techniques. Macroscopic and microscopic study of sediments and rocks.

GLY 4650 Paleobiology (5)
Development of life as traced through the fossil record. Survey of the main groups of animals commonly found as fossils. Theories of evolution and extinction. Study of the major microfossil groups used in biostratigraphic zonation, and as paleoecologic indicators. Prerequisites: physical and historical geology, general biology, or the instructor's permission.

GLY 4650L Paleobiology Laboratory (2)
Microscopic study of foraminifera, radiolaria and the diatoms. Study of invertebrate fossils, and osteology of the vertebrates. Corequisite: GLY 4650.

GLY 4730 Marine Geology (5)
Survey of the main physiographic provinces of the ocean floor. Modern theories concerning the evolution of the crust; continental drift, seafloor spreading. Distribution and thickness of deep-sea sediments, and their relationship to the morphology and evolution of the crust. Deep-sea mineral resources. Marine geology of the Caribbean from recent data. Sea-bed assessment of mineral resources in the Caribbean and neighboring region. Prerequisites: OCE 3014, GLY 4555 or instructor's permission.

GLY 4730L Marine Geology Laboratory (1)
Training in the analysis and interpretation of marine geophysical data. Corequisite: GLY 4730.

GLY 4791 Cartography and Geologic Surveying (5)
A three-week course to be offered in the United States or in the Caribbean islands. Instruction and practice in methods of geological mapping using topographic base maps and aerial photographs or plane table. Prerequisite: GLY 4401 or equivalent. Open to majors only.

GLY 4792 Caribbean Mineral Resources Field Trip (5)
A three-week field course in at least two Caribbean islands. Cursory review of the geologic factors governing the occurrence, size, and economic value of mineral deposits. Emphasis is on bauxite, copper, and energy resources. Visit to selected regions of active exploitation and processing plants, as well as abandoned mines and potential sites of future exploitations. Prerequisite: GLY 3157 or instructor's permission.

GLY 4816 Mineral Deposits (5)
Morphology and genetic processes involved in known occurrences of mineral deposits; structural factors governing their size, location and shape. Exploration, detection, and exploitation methods. Emphasis is placed on known and potential mineral deposits of the Caribbean and neighbouring areas. Prerequisites: Physical Geology or equivalent, GLY 3322, and chemistry.

GLY 4816L Mineral Deposits Laboratory (2)
Microscopic petrology and petrography of ore samples and interpretation of geologic maps bearing on mineral deposits. Special emphasis is put on the Caribbean region. Corequisite of GLY 4816.

GLY 4910, GLY 4911 Independent Study (VAR)
Individual research under the supervision of a professor in the student's field of specialization or interest. Subject may deal with laboratory work, field, and/or bibliographical work. Field research in the Caribbean is encouraged. Varia-

(Continued)

Physical Sciences
Environmental Studies

ble credit to a maximum of 10 credits. Permission of the student's advisor is required.

GLY 5620 Caribbean Stratigraphic Micropaleontology (5)
Survey of the stratigraphy of biostratigraphic type-sections described in the Caribbean area. Deep-sea stratigraphy from both piston-cores and deep-sea drilling samples. Emphasis is placed on planktonic foraminifera and radiolaria species used as index-species in the equatorial-tropical biozonation typified in Cretaceous and Cenozoic Caribbean sediments. Paleobiogeographic and paleoecologic considerations. Considerable time will be devoted to the study and identification of specimens under the microscope. Prerequisite: GLY 4650, or the instructor's permission.

GLY 5793 Caribbean Shallow-Marine Environments (5)
Four-week field study of multiple tropical environments as illustrated in the Caribbean. Physico-chemical processes in the near-shore arenaceous, argillaceous and calcareous environments. Coral reef morphology, ecology and distribution patterns. Dynamnical processes acting on the nearshore environments, and their effects on reef growth and distribution. Reef bioerosions. Coastal evolution in response to natural processes. On-site study of some similar emerged environments in the Caribbean islands. Economic importance of tropical shallow-marine environments in world fuel resources. Course includes extensive field work both on land and underwater, and an individual field research project. Qualifications: Open to advanced undergraduate and graduate students in the earth and biological sciences or cognate fields.

GLY 5816 Mineral Deposits (5)
Morphology and genetic processes involved in known occurrences of mineral deposits; structural factors governing their size, location and shape. Exploration, detection, and exploitation methods. Emphasis on known and potential mineral deposits of the Caribbean and neighboring areas. Prerequisites: Physical Geology or equivalent, OCE 3014, GLY 3322, and chemistry.

GLY 5816L Mineral Deposits Laboratory (2)
Microscopic petrology and petrography of ore samples, and interpretation of geologic maps bearing on mineral deposits. Special emphasis on the Caribbean region. Corequisite: GLY 5816.

MET 4301 Dynamic Meteorology (5)
Dynamical processes in the atmosphere. Meteorological thermodynamics and atmospheric statics. Scientific bases for modern quantitative and analytical meteorology. Variation of the wind and pressure fields in the vertical. Mechanism of pressure change; behavior of cyclones and anticylones. Dynamic forecasting by numerical methods. Prerequisites: AST 3100, GEO 3200C, and MET 4701.

MET 4701 Meteorology (5)
The earth's atmosphere and its physical properties. General circulation and thermal structure of the atmosphere on a global and local scale. Physics and dynamics of clouds. Weather analysis and forecasting including temperate and tropical areas, with emphasis on the Caribbean and neighboring areas, birthplace of major Atlantic tropical storms. Reading of weather maps, introduction to meteorologic instruments, transmission and plotting of meteorological data. Recommended preparation: AST 3100, GEO 3200C, and competence in physics and calculus.

OCE 3014 Physical Oceanography (5)
A survey of the ocean as a physico-chemical environment. Properties of sea water, and the influence of sea-air interactions on the ocean structure. Water masses and oceanic circulation patterns. Diffusion and advection and their relation to oceanic properties. Heat budget and climatic control. Impact of oceanic properties on man's environment and economy. Case study of a mediterranean sea illustrated by the Caribbean Sea. One field trip to be expected.

OCG 6105 Advanced Marine Geology (4)
Application of geophysical and geological data to the interpretation of the earth's crust under the oceans, including the data provided by deep-sea drilling, dredging, piston-coring, gravity magnetism, and seismicity. Special emphasis will be given to the genesis and evolution of Atlantic and Caribbean margins, and their potential for oil resources. Prerequisites: GLY 4730, or permission of instructor.

OCG 6105L Advanced Marine Geology Laboratory (1)
Interpretation of geophysical data pertaining to the structure and composition of selected Atlantic and Caribbean margins.

OCG 6280 Marine Sedimentary Petrology (4)
Analysis of the genesis, distribution pattern, physical and chemical properties of marine sedimentary facies, with emphasis on deep-sea sediments. Topics include deep-sea diagenetic and lithification processes, their geochemical relationship in time and space. Prerequisite: GLY 4555, or permission of instructor.

OCG 6280L Marine Sedimentary Petrology Laboratory (1)
Microscopic and geochemical analyses of marine sedimentary facies.

OCG 6453 Hydrochemical Reactions in Coastal Aquifers (4)
A systematic study of the distribution and origin of the main rock-forming elements, with special emphasis on the geochemical factors involved in the concentration of minor elements in hydrogeological systems of coastal aquifers. Prerequisites: Gen. Chemistry & GLY 3850 or equivalent.

OCG 6453L Hydrochemical Reactions in Coastal Aquifers Laboratory (1)
Quantitative and qualitative geochemical methods of water analyses, and their application to water quality monitoring and conservation.

OCP 5291 Coastal Processes (4)
Dynamics of estuarine and nearshore circulation. Advective and diffusive processes. Natural and man-induced supply of particulate matter to the coastal region, and the longshore and offshore dispersal of this matter. Waves, tides, periodic sea level changes and their effects on coastal erosion and sedimentation. Coastal management. Prerequisites: OCE 3014 and EVS 4108 or permission of instructor.

OCP 5291L Coastal Processes Laboratory (1)
Working methods, including remote sensing techniques and use of oceanographic instruments, in the study of coastal processes.

Environmental Studies

This is an interdisciplinary program, involving eight departments (Physical Sciences, Biological Sciences, Psychology, Political Science, Sociology/Anthropology, International Relations, Philosophy/Religion, and Economics), which prepares students to work in professions with an environmental emphasis. Students may choose either a Bachelor of Arts (non-science) program, or a Bachelor of Science (science) program. Degrees are awarded by the Department of Physical Sciences. For a full description of the degree programs, participating faculty and course offerings, see the separate listing under ENVIRONMENTAL STUDIES.

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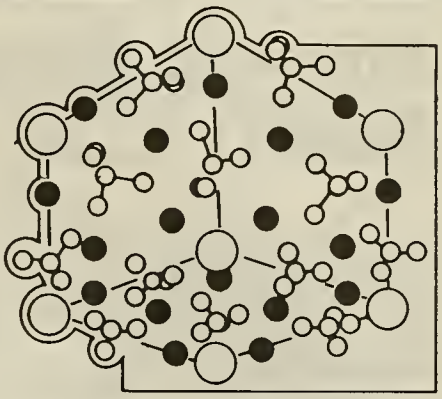
Physical Sciences
Physics



Course Descriptions

Definition of Prefixes
EVR-Environmental Studies; ISC–Interdisciplinary Natural Science; MET–Meteorology

EVR 3011 Environmental Science I (5)
A course for nonscience majors, offering an introduction to the fundamental principles and concepts of ecology, and to air pollution and water resources. No prerequisites.

EVR 3012 Environmental Science II (5)
A course for nonscience majors, offering an introduction to energy resources and conservation, agricultural pollution, noise pollution, and solid waste problems.

EVR 3013 Environmental Science III (5)
A course for nonscience majors, offering an introduction to the ecology of South Florida through lectures and a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. The course also deals with natural resource conservation, wildlife management and ecology, and population dynamics.

EVR 3931 Topics in Environmental Studies (5)
An intensive analysis of several current environmental topics. Recommended for primary and secondary school teachers.

EVR 4021 Survey of Environmental Problems I (5)
An in-depth study of four or five environmental problems of current interest and continuing significance. The course requires competency at the college introductory level in at least three of the following: biology, chemistry, geology, physics.

EVR 4022 Survey of Environmental Problems II (5)(S)
A continuation of EVR 4021.

EVR 4211 Water Resources (5)
A seminar dealing with various aspects of water use, water pollution problems, chemistry and ecology of South Florida's waters. General biology is a prerequisite. General chemistry and general ecology are recommended.

EVR 4231 Air Resources (5)
Common air pollutants–their sources and methods of control. Different legislative and administrative approaches will be studied. Prerequisite: General Chemistry.

EVR 4311 Energy Resources (5)
Seminar dealing with power and energy production in modern society, fundamental energy relationships of industrial and domestic processes.

EVR 4905 Research and Independent Study (VAR)
The student works with a professor on a research project.

EVR 4920 Environmental Colloquium (5)
An exploration of contemporary ideas on environmental issues. The course brings together faculty and students in a seminar format. Each week a subject will be presented by a faculty member or student and an open discussion will follow.

EVR 5061 South Florida Ecology: Field Studies (3)
An introduction to the ecology of South Florida through a series of field trips into several unique ecosystems, such as the Everglades, hardwood hammocks, and coastal regions. No science background required.

EVR 5141 Environmental Nuclear Chemistry (5)
Nuclear reactions and the nature of radioactivity. Properties and uses of radioactive isotopes, fission, and fusion. Introduction to reactor technology. Consent of instructor required.

EVR 5236 Air Pollution Dynamics (5)
A course designed to give an understanding of the fates of atmospheric pollutants. Scavenging processes in the atmosphere; radiation, residence times, chemical reactions, global transport process, point source dispersion and modeling calculations. Prerequisite: EVS 3360 or EVR 4231.

EVR 5935 Special Topics (VAR)
A graduate-level course dealing with selected environmental topics. The content will not necessarily be the same each time the course is offered.

EVR 5936 Topics in Environmental Studies (5)
An analysis of several current environmental topics. Recommended for primary and secondary school teachers.

EVR 5907 Research and Independent Study (VAR)
The student works with a professor on a research project. Variable credit.

EVR 3949/EVR 4949 Cooperative Education in Physical Sciences (5-5)
One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluations will be required of each student.

MET 4701 Meteorology (5)
The earth's atmosphere and its physical properties. General circulation and thermal structure of the atmosphere on a global and local scale. Physics and dynamics of clouds. Weather analysis and forecasting including temperate and tropical areas, with emphasis on the Caribbean and neighboring areas. Reading of weather maps. Introduction to meteorological instruments, transmission and plotting of meteorological data. Competence in physics and calculus is required.

Physics

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science* (*Students interested in teacher certification see note on page 242.)

LOWER DIVISION PREPARATION:

Required Courses: part of the 90 quarter hours (60 semester hours) of lower division coursework should be in the sciences.

Recommended Courses: algebra and trigonometry; chemistry (10 quarter hours); physics with or without calculus; calculus (10 quarter hours). These courses may be taken at the University, if not completed at the lower division.

UPPER DIVISION PROGRAM:

Major:

		Quarter Hours
Required Courses:		**55**
PHY 3123	Modern Physics	5
PHY 4323, PHY 4324	Electromagnetism	10
PHY 4221	Classical Mechanics	5
PHY 4526	Statistical Thermodynamics	5
or		
PHY 3503	Thermodynamics	5
*PHY 4810L *or* PHY 4811L *or* PHY 4812L	Senior Physics Laboratory	5
PHY 4604	Quantum Mechanics	5
Electives in experimental or theoretical physics		15
Math elective beyond 10 quarter hours of calculus		5
Electives:		35
		90

Must include PHY 3040C–3041C–3042C and Laboratory if the equivalent is not taken in the lower division.

(Continued)

Physical Sciences
Physics

Remarks: A grade of C or better in all courses required for the major is necessary for graduation.

Minor in Physics:

Two minors are available to students. Track A is designed for the student who plans to take the introductory physics sequence PHY 3040C–3041C–3042C or its equivalent. Track B is designed for the student who plans to take the introductory sequence PHY 3050C–3051C or its equivalent.

		Quarter Hours	
Track A:			**30**
PHY 3040C–PHY 3041C–PHY 3042C	Physics with Calculus	15	
PHY 3040L	Junior Physics Laboratory	2	
PHY 3123	Modern Physics	5	
*Additional approved courses		8	
			30
Track B			**32**
PHY 3050C–PHY 3051C	Physics without Calculus	10	
PHY 3040L	Junior Physics Laboratory	2	
PHY 3123	Modern Physics	5	
*Additional approved courses		15	
			32

*Chosen with approval of physics advisor.

Master of Science in Physics

The Department of Physical Sciences at Florida International University participates jointly with the Department of Physics at Florida Atlantic University in offering the M.S. in Physics. Students entering the program must have a B.S. (or equivalent), and must satisfy the requirements for admission to the FAU master's program and the FAU requirements for the M.S. in Physics. The degree is awarded by Florida Atlantic University.

Cooperative Education

Students seeking the baccalaureate degree in Physics may also take part in the Cooperative Education Program conducted in conjunction with the Department of Cooperative Education in the Division of Student Affairs. The student spends several quarters fully employed in an industrial or governmental physics laboratory. For further information consult the Department of Physical Sciences or the Department of Cooperative Education.

Course Descriptions

Definition of Prefixes

AST–Astronomy; ISC–Interdisciplinary Natural Science; PHS–Physics-Specialized; PHY–Physics; PSC-Physical Sciences.

AST 3025L Observational Astronomy (2) (F)

A study of astronomical objects visible from Miami: stars and their constellations, planets, binary stars, star clusters, variable stars, nebulae and galaxies will be discussed and observed.

AST 3050 Modern Astrophysics (5)(W)

An introduction to the structure of stars and galaxies and the evolution of the universe as a whole. Topics will include atomic spectra, stellar classifications, galactic structure and cosmology. Prerequisites: PHY 3040C–3042C, Calculus I and II, and AST 3002.

AST 3100 Modern Astronomy (5)(F)

The structure and evolution of our solar system is studied with particular emphasis on physical concepts. Topics will include astronomical coordinate systems, celestial mechanics, the earth's motions, and a description of the solar system. Prerequisites: College algebra and geometry.

PHS 4303 Nuclear Physics (5)(S)

A treatment of the current state of the nuclear theory problem and a discussion of modern experimental methods.

PHS 5125 Seminar in Theoretical Physics (5)(S)

The theoretical foundation of classical mechanics, relativity, fields, quantum mechanics, group theory and relativity.

PHS 5400 Solid State Physics (5)(S)

Crystalline form of solids, lattice dynamics, metals, insulators, semi-conductors, and dielectric materials. Prerequisites: general chemistry, general physics with calculus, and mathematics through Calculus II.

PHY 3033 Physical Aspects of Unsolved Mysteries (5)(W)

Topics peripheral to orthodox science, such as UFO's, attempts to communicate with alien beings, the theories of Velikovsky, Stonehenge, and psychic phenomena, are presented for discussion. Emphasis is on physical ideas, scientific reasoning, and the interplay between theory and experiment.

PHY 3040C/PHY 3041C/PHY 3042C Physics with Calculus (5-5-5)(F,W,S,SS)

Basic physics sequence for students that have had mathematics through calculus. PHY 3040C will cover kinematics, Newton's laws, conservation of linear and angular momentum, and gravitation. PHY 3041C continues with fluid dynamics, sound, thermodynamics, and optics. PHY 3042C covers electric fields, magnetic fields, and electromagnetic waves. Calculus may be taken concurrently.

PHY 3040L/PHY 3041L/PHY 3042L Junior Physics Laboratory (2-2-2)(F,W,S)

Laboratory section of PHY 3040C, PHY 3041C, PHY 3042C. This may be taken separately.

PHY 3050C/PHY 3051C Physics without Calculus (F,W,S,SS)

Introductory physics for students without calculus. This is a two quarter sequence, which covers most of the material in the PHY3040C–3042C sequence.

PHY 3123/PHY 3124 Modern Physics (5-5)(W,S)

Recent developments in physics are discussed. Subject matter includes: review of classical physics, special relativity, four-vectors, particle aspects of waves, wave aspects of particles, the hydrogen atom, many electron atoms, nuclear instrumentation, nuclear structure, nuclear reactions, elementary particles, introduction to quantum mechanics, and solid state physics.

PHY 3424 Optics (5)(W)

General formulation of geometrical optics including matrix techniques, interference phenomena, and the theory of Fraunhofer and Fresnel diffraction, will be among the topics covered.

PHY 3503/CHM 3410 Thermodynamics (5)(F)

Same as CHM 3410. Fundamental principles of thermodynamics, the first, second, and third laws, free energy, entropy, the chemical potential, phase rule and its applications. The first in a three-quarter physical chemistry sequence. Prerequisites: general chemistry, general physics with calculus and mathematics through Calculus II.

PHY 3722C Electronics (5)(SS)

Including solid state theory and the theory of circuits, circuit operation and design in lecture and laboratory sessions.

PHY 3949/PHY 4949 Cooperative Education in Physical Science (5-5)

One quarter of full-time supervised work in an outside laboratory taking part in the University Co-op Program. Limited to students admitted to the Co-op Program. A written report and supervisor evaluation with be required of each student.

PHY 4221 Seminar in Classical Mechanics (5)(W)

Newtonian mechanics including statics of parti-

(Continued)

Political Science

cles, cables and rigid bodies, dynamics of particles and groups of particles in three dimensions, and motion of a rigid body in a plane. A background in general physics is advisable.

PHY 4323/PHY 4324 Seminar in Electromagnetism (5-5)(F,W)
The theory of electromagnetic fields and waves is developed from basic principles. Vector calculus, Coulomb's law, Gauss's Law, electrostatic potential, dielectrics, solutions to La Place's and Poisson's equations, magnetic induction, vector potential, magnetic scalar potential, Faraday's law, magnetic materials, Maxwell's equations and propagation of waves in space and various media are discussed. Prerequisite: Calculus.

PHY 4526/CHM 4460 Statistical Thermodynamics (5)(F)
Review of the fundamental laws of thermodynamics applied to simple systems. Elementary kinetic theory of gases applied to diffusion, viscosity, thermal and electrical conductivity. Boltzmann, Fermi-Dirac and Bose-Einstein distribution functions applied in the Boltzmann limit to the calculation of thermodynamic variables. Prerequisites: general chemistry, general physics with calculus, and mathematics through Calculus II.

PHY 4604 Quantum Mechanics I (5)(S)
An introduction to the basic postulates of quantum mechanics. Solutions to the time independent Schrodinger equation are obtained for particles in one dimensional potential wells, the hydrogen atom solutions and the harmonic oscillator problem. Prerequisites: general chemistry, general physics with calculus, and mathematics through Calculus II. Multivariable calculus or differential equations recommended.

PHY 4750L Introduction to Scientific Instrumentation (5)(W)
The student learns to set up and operate such standard pieces of laboratory apparatus as bridges, amplifiers, oscilloscopes, frequency counters, flowmeters, and thermocouple circuits utilizing chart recorders. A background in general physics is recommended.

PHY 4810L, PHY 4811L, PHY 4812L Senior Physics Laboratory (5-5-5)(F,W,S)
Advanced laboratory topics are treated. Modern physics laboratory equipment is used, and the student is introduced to current laboratory practice.

PHY 4905, PHY 4906, PHY 4907 Independent Study (VAR)(F,W,S,SS)
The student will work under the supervision of a faculty member on subject material of mutual interest.

PHY 4936, PHY 4937, PHY 4938 Special Topics (VAR)
In-depth study of topics of special physics interest.

PHY 5250 Physics of Fluids (5)(S)
Introduction to the constitutive equations of fluid mechanics. Topics in steady compressible and incompressible flows. Prerequisites: Classical Mechanics and Thermodynamics, or consent of instructor.

PHY 5624 Introduction to Physics Research (5-5-5)(F,W,S,SS)
Students are introduced to research techniques by assisting with an original investigation in experimental or theoretical physics.

PHY 5910 Seminar in Advanced Theoretical Mechanics (5)(SS)
A continuation course in classical mechanics which leads naturally into quantum mechanics. Topics to be covered will include Lagrangian and Hamiltonian methods, variational techniques, Poisson brackets, symmetries, algebra of quantum mechanics, representations, Dirac ladder operations, spin, and the hydrogen atom.

PHY 5936, PHY 5937, PHY 5938 Seminar in Special Topics (VAR)
The student will work under the supervision of a faculty member on subject material of mutual interest.

PSC 3001 Concepts in Physics (5)(S)
Self contained course for liberal arts majors covering the major concepts in physics; necessary concepts of elementary algebra and geometry will be covered in the beginning of the course and used to discuss Newtonian, relativistic, and quantum mechanics and their applications to atoms, stars and the universe as a whole. Throughout the course the dynamic nature of scientific laws will be stressed as new, more general laws are first hypothesized and then used to predict and eventually cross new frontiers of physics.

PCS 3351 Earth Physics (5)
The planet earth treated as a physical system. The formation and structure of the earth will be discussed as well as current dynamic changes.

PSC 3810 Frontiers of Physics (5)(F)
An introduction on an elementary level to developments in physics in the 20th century. The subjects covered will include relativity, atomic and molecular structure, solid state physics, the laser, nuclear structure, particle physics and astrophysics. For nonscience majors.

Political Science Major

Judson De Cew, *Assistant Professor and Chairperson*
Joel Gottlieb, *Associate Professor*
Joyce Lilie, *Associate Professor*
Brian Nelson, *Associate Professor*
Mary Volcansek, *Associate Professor*
Mark Rosenberg, *Assistant Professor*
John Stack, *Assistant Professor*
Arthur Svenson, *Assistont Professor*

A major in Political Science provides students with the opportunity to acquire a broad education that will equip them to adapt to a wide variety of careers. The program for majors is designed to encourage the analysis of theories, institutions, and processes of political systems in the context provided by the social sciences; to stimulate a grasp of the broad sweep of political science as a discipline; to develop a continuing and responsible interest in political activity and public affairs; to provide the opportunity to acquire a fundamental understanding of political science as a basis for citizenship, a career in government, or professional study and service; and to stimulate the qualified student's interest in graduate study in political science.

LOCATION: Tamiami Campus Only

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses:

	Semester Hours
American Government*	3
State and Local Government*	3
International Relations*	3
American *or* World History	6
Economics	3
Introduction to Logic	3
Advanced Composition	3
Mathematics or Statistics	3

Remarks: The three starred courses in the area of Political Science are particularly recommended. If taken at the lower division level, they will permit the student greater flexibility and depth in his Political Science major at the upper division level.

(Continued)

Political Science

UPPER DIVISION PROGRAM:
For a degree in Political Science no specific courses are required. Rather, courses in Political Science must be distributed in the following manner:

		Quarter Hours
A.	Breadth Requirements: One 5-credit course in each of the following fields:	25
	American Politics (AP)—this breadth area can be met by one of the following courses:	
	PAD 3003—Politics of Public Bureaucracy	
	POS 3044—Government and Politics of U.S.	
	POS 3153—Urban Politics	
	POS 3424—The Legislative Process	
	POS 3453—Political Parties	
	POS 4413—The Presidency	
	PUP 3004—Public Policy: U.S.	
	JUDICIAL POLITICS (JP)	
	COMPARATIVE POLITICS (CP)	
	INTERNATIONAL THEORY AND METHODOLOGY (IP)	
	POLITICAL THEORY AND METHODOLOGY (IP)	
B.	Depth Requirements Five courses from any *one* of the following areas: a. American/Judicial Politics (AP,JP) b. Comparative/International Politics (CP,IP) c. Political Theory (PT)	25
C.	Electives: These courses may be taken outside the major but are normally chosen to complement the student's academic and career interests	40
		90

Remarks: Students intending to graduate with a degree in Political Science must have a "C" or better in all courses used to fulfill the breadth and depth requirements of the major.

LOCATION: Tamiami and North Miami Campus

Minor in Political Science:
Prescribed Courses:

1. No required courses
2. A minimum of 25 credits in Political Science
3. A maximum of 5 credits each in Political Science internships and independent studies may apply to the 25 credit requirements.

PRE-LAW STUDENTS—The Department of Political Science recognizes the interests and needs of the Political Science major who plans to attend law school. The basic skills important to a pre-law student include: (1) thinking logically, (2) reading intelligently, and (3) expressing oneself clearly. Beyond these basic skills, the department encourages the student to acquire a broad background in political science, rather than to select only courses which deal with public law. Thus the requirements for the major allow the pre-law student to develop a wide comprehension of five major areas within political science and then to achieve greater depth of understanding in one broad area. For most pre-law students, that area may be American and judicial politics. The Department will counsel a student on pre-law school concerns and preparation, as an integral part of the Department's overall advising program. In addition, special opportunities will be available to a student who is interested in participating in judicial internships.

Internships—The Department provides the student with opportunities for work-study experiences in governmental and non-governmental agencies. Five categories of internships are available to students: (1) judicial internships, (2) administrative internships, (3) legislative internships, (4) campaign internships, and (5) international internships. Standards for enrollment as an intern students include:

1. Enrollment is by permission of instructor only. A student wishing to enroll as a public affairs intern should consult with the appropriate faculty members and receive written permission to enroll. Ordinarily, specified courses must be taken prior to or concurrent with the internship.
2. A political science major may count a maximum of 10 credit hours in internships toward his major. Five additional hours may be counted as electives for a maximum of 15 credit hours in internship in political science.
3. All public affairs internships in political science will be on a "Credit—No Credit" basis. For further information, contact the Department of Political Science.

Upper Division Transfer Credit—As a general rule, students will receive transfer credits for junior and senior level courses in political science with a grade of "C" or better. These courses may then be applied to the 50 credit hours requirement for majors in political science.
Major Advising Program—All new majors meet with the Department Chairperson prior to being assigned an advisor. All advisors are members of the political science faculty and meet with students on a regular basis to discuss program design and scheduling matters.

Course Descriptions

Definition of Prefixes
COP—Comparative Politics; INR—International Relations; PAD—Public Administration; POS—Political Science; POT—Political Theory; PUP—Public Policy.

COP 3002 Introduction to Comparative Politics (5)
This course introduces students to research strategies, concepts, and theories of comparative politics. There will be a focus on the three predominant types of modern political systems (democracy, autboritarianism, and totalitarianism), followed by an examination of the current theoretical approaches to studying cross-national political behavior. (CP)

CPO 3303 Government and Politics of South America (5)
A cross-national discussion of the political systems and cultures of the Latin American nations, with special emphasis on the larger countries. Attention is given to the role of the military, and to the problem of violence. Designed to give the student an overview of the political life of the nations with whom we share this hemisphere. (CP)

CPO 3304 Theories of Latin American Politics (5)
This course analyzes the multiple structures, processes, and groups which are relevant to an understanding of Latin American political economy. Of special interest are the political impacts of land and wealth inequality and economic dependency. The dynamics of Latin American politics are considered, with an emphasis on the role of the military and the church. Alternate strategies for modernizing the region are considered. (CP, PT)

CPO 3323 Government and Politics of the Caribbean (5)
Studies the political system of the major British, French, Dutch, and Spanish areas in the Caribbean basin. Attention is focused on such factors as political party democracies in a nonindustrial setting. The paradoxes between modernity and tradition throughout the developing Caribbean, and the relationship between politics, economics, and culture are discussed. The student is helped to understand the dynamics of change in an important area of the world and to compare those dynamics with change in his own country. (CP)

(Continued)

Political Science

CPO 3333 Government and Politics of Central America (5)
This course analyzes the historical and contemporary political dynamics of the five countries of Central America. Special attention is given to problems of development and modernization within the context of the region's economic dependence on the United States. Special attention is given to the problem of political restraints on the modernization process and to those regional arrangements which have been created to solve the area's problems. The student will develop a better understanding of a region which has close ties to the United States. (CP)

CPO 3513 Government and Politics of China (5)
An intensive examination of the major political institutions of China. A critical analysis of changing aspects of traditional relationships in Chinese political culture, and major reform movements in contemporary Chinese politics. (CP)

CPO 3514 Government and Politics of Korea (5)
An intensive examination of the major political institutions of South and North Korea. A critical analysis of changing aspects of traditional relations in Korean political culture and major reform movements in contemporary Korea. (CP)

CPO 3553 Government and Politics of Japan (5)
An intensive examination of the major political institutions of Japan. A critical analysis of changing aspects of traditional relations in Japanese political culture and major reform movements in contemporary Japanese politics. (CP)

CPO 3643 Government and Politics of the Soviet Union and Eastern Europe (5)
An intensive examination of the political structures and institutions of the Soviet Union and East European Communist states. Particular attention is paid to the historical and cultural underpinnings of the Soviet regime. The role of the Marxist-Leninist idealogy in shaping policy processes and content is given careful analysis. (CP)

CPO 4005 Topics in Comparative Politics (Var)
An intensive examination of selected political topics from a cross-national point of view. The subjects will vary, depending upon the desire of both students and faculty. Allows the student to choose topics of particular interest to him or her. (CP)

CPO 4034 The Politics of Development and Underdevelopment (5)
This course is an analysis of the causes of development and underdevelopment in Third and Fourth World countries. It includes an analysis of major theoretical approaches to understanding development problems, as well as an analysis of the roles of major national and non-national actors (CP/IP)

CPO 4055 Politics of Authoritarianism (5)
The purpose of this course is to identify the conceptual and empirical characteristics of authoritarian regimes. An ideal typical authoritarian regime will be established, followed by case study analyses of modern authoritarian systems, like those of Brazil, Mexico, and Portugal. The course is designed to analyze the circumstances giving rise to non-totalitarian modern dictatorships, their political dynamics and their survival capability. (CP)

CPO 4072 Comparative Electoral Behavior (5)
Public opinion, voting choice, and electoral patterns from a comparitive and historical perspective. Attention will focus on Western Europe and Latin America. Differences from North American trends and patterns will also be detailed. (CP)

CPO 4103 Government and Politics of Western Europe (5)
Studies of political systems of the major European countries on a comparative basis. Attention is focused on such factors as political party systems, the cabinet form of government, and the politics of the Common Market. Considers the implications of the impact of mass society on these nations. Enables the students to better understand the nations which have supplied many of the theoretical foundations of modern politics. (CP)

CPO 4327 Topics in Caribbean Politics (5)
An intensive examination of selected topics dealing with the Caribbean area. The subjects will vary, depending upon the desires of both students and faculty. (CP)

CPO 4360 Cuban Politics (5)
Examines the course of twentieth century Cuban politics. The course is subdivided into five parts covering the three periods of relatively stable politics and the two major revolutions. (CP)

INR 3002 Dynamics of World Politics (5)
An examination of actors, institutions, and processes in world politics. Attention is given to unfolding transnational institutions and processes, including the role of states, international organizations, and non-governmental actors. An examination of the nation-state system. Attention is given to the use of force in international affairs, as well as those organizations, such as the United Nations, which have an international dimension. The course will aid the student in understanding the complexities of world politics. (IP)

INR 3403 International Law (5)
The law of nations, including the laws of war. Includes a discussion of the development of legal norms applicable to the international arena, from both Western and non-Western perspectives. Examines the emerging body of transnational law in social, economic, and technological areas of international relations. Enables the student to understand the difficulties involved in maintaining world peace. (IP, JP)

INR 3502 International Organizations (5)
An analysis of the factors and problems involved in administering change on a transnational basis. Stress is placed on the difficulty of applying legal norms to the international arena. Attention is given to those organizations, especially the United Nations, which are entrusted with implementing international agreements. Enables the student to understand the difficulties involved in maintaining world peace. (IP)

INR 3603 Theories of World Politics (5)
An examination of the principal theoretical approaches to the study of world politics. This course surveys traditional, behavioral, and transnational frameworks. The course is designed to provide the student with an analytical basis for evaluating actors, institutions, and processes. (IP,PT)

INR 4084 Ethnic Conflict in Transnational Politics (5)
This course examines the political dimensions of ethnic conflict from a comparative perspective. It evaluates the dynamics of ethnic conflict in Western Europe, Africa, Latin America, and the United States, through a series of case studies. (IP)

INR 4102 American Foreign Policy (5)
An examination of the legal, administrative, and political structure by which American foreign policies are formulated and implemented. Includes a discussion of the objectives and consequences of United States foreign policy in selected regional, social-economic, and ideological areas. Enables the student to understand the procedures by which foreign policy is made and implemented in the United States. (IP,AP)

(Continued)

Political Science

INR 4204 Comparative Foreign Policy (5)
This course is an analysis of the development of the foreign policy-making process in the United States, Britain, France, West Germany, and Italy. Particular attention is directed to the domestic and international factors which affect the making of foreign policy. (CP,IP)

INR 4244 Latin America in World Politics (5)
This course will be primarily concerned with Latin America's role in the world political system. Of special interest will he the impact of the North-South split on Latin America, and in particular Latin America's relationship to the United States. Key issues of international politics concerning Latin America, including the Panama Canal, will be selected for study. (CP,IP)

INR 4407 Political Foundations of International Law (5)
An examination of the interaction between politics and international law, with particular emphasis on such interaction during the present century. The role of international institutions in the modifying of existing international law concepts and the developing of such concepts is also examined. (IP, JP)

INR 4931 Topics in International Politics (Var)
An intensive examination of selected topics with an international dimension. Subjects will vary, depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her. (IP)

INR 4942 International Internship (Var)
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between student and advisor.

INR 5414 Topics in International Law (Var)
An intensive examination of selected topics in international law. Subjects will vary (including, for instance, the political dimension of international law) depending upon the desires of both students and faculty. Allows the student to choose topics of particular interest to him or her.

INR 6007 Seminar in International Politics (5)
Graduate seminar on special topic in international politics. Topic to be announced in advance.

INR 6205 World Politics (5)
This course provides graduate students with an understanding of the major conceptual approaches to world politics. It emphasizes the analysis of significant actors, institutions and processes at work in the contemporary global system as well as possible future alternatives.

PAD 3003 Politics of Public Bureaucracy (5)
An introduction to the political environment of administrative decision-making in public agencies. Special emphasis is placed upon the politics of budgeting, personnel management, organizational requirements, and policy making. (AP)

PAD 3803 Urban Government and Administration (5)
A study of the organization, administrative decision-making, and process of urban government; interaction with the political process. This course attempts to provide students with an understanding of the basic structure of urban government and administrative decision-making processes. The interaction of bureaucracy with political parties, interest groups, and voluntary citizen association groups will be examined. (AP)

PAD 4944 Administrative Internship (Var)
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between student and advisor.

POS 3001 Foundations of Political Science (5)
Introduces the student to the major fields of political science. Attention is given to the concepts, definitions, and terminology used in the discipline. Intended for the non-major. Elective credit only for political science majors.

POS 3044 Government and Politics of the U.S. (5)
An examination of the origin and development, structure and operation of the Government of the United States, with an emphasis on the characteristics and political consequences of federalism. Allows the student to develop a better understanding of the political system in which he or she lives. (AP)

POS 3122 State Government and Politics (5)
A study of the political processes, structure, and development of state systems. This course attempts to provide the student with an understanding of the basic structure of state government and political processes. (AP)

POS 3153 Urban Politics (5)
An examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is placed on how urban problems are identified; and the way proposed solutions are formulated, legitimized, and administered by urban policy-making processes. Includes a discussion of urban political culture. Enables the student to understand major problems confronting communities in urban areas. (AP)

POS 3283 The Judicial Process (5)
An introduction to the study of public law. Examines the relationship between politics and judicial structure and process. Emphasizes the judicial system as a particular kind of policy-making system, and evaluates its strengths and weaknesses from a policy-making perspective. (JP)

POS 3424 The Legislative Process (5)
Examines the context and process of legislative decision-making, including the impact of elections, groups, bureaucracies and the norms of legislative behavior. Evaluates legislatures in light of various theories of representation and conflict-management. (AP)

POS 3453 Political Parties (5)
Studies the internal structure, political functions, and behavior of modern political parties. Attention is given to the relationships between political parties and various economic, military, ethnic, and regional interests. Enables the student to understand the problems of expressing and structuring political demands to facilitate or obstruct governmental decision-making. (AP)

POS 3603 Constitutional Law: Powers (5)
An examination of the basic principles of American government, as defined through constitutional law. Focus will be on the nature of the union, federalism, national government powers, separation of powers, state government powers, and powers of the respective branches of government. (JP)

POS 3604 Constitutional Law: Limitations (5)
An examination of the limitations on government as defined by the Supreme Court through constitutional law. Focus will be on the limitations of government with respect to the rights of the individual, of groups, and of the states. Particular attention will be paid to civil rights, civil liberties, the rights of the accused, political rights, and economic liberties. (JP)

(Continued)

Political Science

POS 3703 Methods of Political Analysis (5)
An introduction to the principal concepts and techniques of data collection and organization in political science. Includes practical exercise in data collection and organization. Highly recommended for those planning graduate study. (PT)

POS 3949 Cooperative Education in Political Science (5)
A student majoring in Political Science may spend several quarters fully employed in industry or government in a capacity relating to the major.

POS 4145 Urban Political Leadership (5)
A theoretical analysis and interpretation of urban political leadership, with special emphasis on the structure of political power and the decision-making process. This course attempts to provide students with an understanding of the basic structure of urban political leadership. The attitudes and values of urban political elites will also be examined. (AP)

POS 4147 Politics of Urban Jewish Leadership (5)
A study of the leadership structure of the Jewish community, with special focus upon the Jewish elite integration process within the community power structure. The course attempts to provide students with an understanding of the nature of Jewish leadership structure and role of Jewish leadership in the community social and political system. (AP)

POS 4154 Topics in Urban Politics and Policy (5)
An examination of the processes by which social conflicts in American urban areas are represented and regulated. Emphasis is on the ways in which urban problems are identified and proposed solutions formulated, legitimized, and administered by urban policy-making processes, includes a discussion of urban political culture. Enables the student to understand the major problems confronting communities in urban areas. (AP)

POS 4233 Opinion and Electoral Behavior (5)
An examination of the social and psychological factors shaping public opinion and voting choice. Particular attention will be directed to the nature of trends and patterns in electoral results and systemic elements influencing such patterns. (AP)

POS 4253 Political Violence and Revolution (5)
An examination of major historical instances and modern expressions of political violence; discussion of revolution from a comparative perspective. Attention will focus on the social origin and political determinants of such events. (CP, PT)

POS 4284 Judicial Behavior (5)
An examination of various approaches, theories, and findings on the behavior of judicial actors, particularly as it relates to judicial decision-making. The focus of the course will be on judges, lawyers, prosecutors, and other relevant actors in the judicial process. (JP)

POS 4413 The Presidency (5)
An examination of the various interpretations of the Presidency. Attention is directed to the role of the President in a technocratic society. Enables the student to understand one of the most visible political institutions. (AP)

POS 4463 Interest Group Politics (5)
An examination of the various types of voluntary associations which seek to influence the political process. Special attention is given to the role of private power in a pluralist system. Enables the student to understand the ambivalent American attitude towards pressure groups and lobbying activities in the legislative and administrative arenas. (AP)

POS 4493 Politics of Judicial Administration (5)
This course is designed to examine the process of judicial administration, particularly from the political perspective. The politics of selecting judicial personnel, financing, budgeting, disposition of litigation, reorganization, and intergovernmental relations will be included. (JP)

POS 4496 Comparative Judicial Politics (5)
An examination of the various modes of dispute settlement and rule adjudication cross-culturally. Emphasis is on the similarities and differences of judicial behavior, judicial decision-making, judicial recruitment and judicial powers in cross-national analysis. (JP, CP)

POS 4713 The Logic of Data Analysis in Political Science (5)
An introduction to the major concepts employed in the analysis of political data. Emphasis is on the logic of explanation rather than the techniques of such explanation. This is not a course in statistical method. Highly recommended for those planning graduate study. (PT)

POS 4905 Independent Study (VAR)
By arrangement with the instructor.

POS 4933 Topics in Politics (VAR)
Subject matter varies according to instructor.

POS 4935 Honors Seminar (VAR)
Subject matter varies according to instructor.

POS 4941 Legislative Internship (VAR)
An opportunity for the student to participate in a selected policy area within one of the communties of South Florida. The nature of the work to be accomplished in connection with the intership will be worked out between the student and advisor. (AP)

POS 4944 Judicial Internship (VAR)
An opportunity for the student to participate in a selected policy area within one of the communities of South Florida. The nature of the work to be accomplished in connection with the internship will be worked out between the student and advisor. (JP)

POS 4949 Cooperative Education in Political Science (5)
A student majoring in Political Science may spend several quarters fully employed in industry or government in a capacity relating to the major.

POS 5606 Topics in Public Law (VAR)
An intensive examination of selected topics in the field of public law. The subjects will vary depending upon the desires of students and faculty. (JP)

POS 5909 Independent Study (VAR)
By arrangement with instructor.

POS 5934 Topics in Politics (VAR)
Subject matter varies according to instructor.

POS 6146 Seminar in Urban Politics (VAR)
Graduate seminar on special topic in urban politics. Topic to be announced in advance.

POS 6934 Topics in Politics (VAR)
Subject matter varies according to instructor.

POT 3013 Ancient and Medieval Political Theory (5)
A study of the major political philosophers of the ancient and medieval periods. Primary emphasis is given to the Greek experience. The nature of political theory as a tradition of discourse is examined. (PT)

POT 3054 Modern Political Theory I (5)
An analysis of the thought of the great political thinkers since Machiavelli, culminating with the nineteenth century theorists. Basic themes and ideas common to all these political theorists will be discussed in detail. The problem of "modernity" will receive special attention. (PT)

(Continued)

Psychology

POT 3064 Contemporary Political Theory (5)
An overview of the major conceptual frameworks used by political theorists to describe, explain, and evaluate political behavior and processes. Stress is placed on political theory, not only as a basis for inquiry but also as a base for political action. This course enables the student to develop analytical abilities with which to interpret the political events of his or her time. (PT)

POT 4055 Modern Political Theory II (5)
An analysis of the thought of the great political thinkers of the late eighteenth, nineteeth, and early twentieth centuries. Primary emphasis is given to the important nineteenth century theorists such as J. S. Mill, Marx, and de Tocqueville. Their theoretical treatment of such modern political phenomena as the masses, bureaucracy, democracy, liberty, and violence is extensively analyzed. (PT)

POT 4113 Politics and The Arts (5)
Employs the arts as a tool of analysis for political science. Includes literature, painting, music and film. Special attention is given to the relationship between popular culture and political systems. (PT)

POT 4123 Alternative Political Futures (5)
Explores the political dimensions of the future. Examines alternative political systems and institutions from the perspective of political ideas. Special attention is given to assessing current political trends and extrapolating them into the future. (AP, PT)

POT 4204 American Political Thought (5)
An examination of American political thought from its 17th century origins to the contemporary period. The continuities and discontinuities in the development of American political ideas since colonial times will receive special attention. (PT)

POT 4302 Political Ideologies (5)
An analysis of modern political ideologies since the French Revolution, including liberalism, conservatism, and socialism. Partiular emphasis will be given to Marxism. The contemporary link between ideology and totalitarianism will be examined. (PT)

POT 4930 Topics in Political Theory (VAR)
An intensive examination of selected topics dealing with political theory. Subjects will vary, depending upon the desires of students and faculty.(PT)

POT 5115 Topics in Politics and The Arts (5)
An intensive examination of selected topics in the field of politics and the arts. Subjects will vary, depending upon the desire of students and faculty.

POT 5934 Topics in Political Theory (VAR)
An intensive examination of selected topics dealing with political theory. The subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her. (PT)

POT 6007 Seminar in Political Theory (VAR)
Graduate seminar on special topic in political theory. Topic to be announced in advance.

PUP 3004 Public Policy: U.S. (5)
An intensive examination of the theory and practice of formulating, legitimizing, administering, and evaluating public policy. Includes a discussion of the role of administrators, legislators, courts, interest groups and political parties in their processes. Gives the student an analytical basis for understanding and participating in the making of public policy in a variety of policy areas. (AP)

PUP 4056 Issues in the Administration of Public Policy (5)
An analysis of the policy consequences of major issues facing political executives and administrators, including planning for the year 2000, bringing government closer to the people, the pathologies of bureaucratization, technology assessment, quantification aids in decision making, needs for policy advice, and experiments in organizational forms. (AP)

PUP 4203 Environmental Politics and Policy (5)
A systematic examination of environmental policy making, emphasizing the various steps involved in transforming private preferences into authoritative public policies. Special attention is directed at the unique political problems posed by pollution, preservation of natural areas, natural resource management, population dynamics, and ecological imperatives. Designed to enable the student, particularly the environmental studies student, to understand the overlapping policy matrices which constrain environmental action. Also enables the student to identify critical decision points in the environmental policy-making process. (AP)

PUP 4314 American Ethnic Politics (5)
This course examines American ethnic politics from conceptual and substantive perspectives. Special attention is devoted to the theoretical dynamics of ethnicity as well as an intensive investigation of Irish, Italian, Jewish, and Black ethnic politics. (AP)

PUP 4323 Women in Politics (5)
Examines the role of women in the political system as they act within, and are affected by, politics. Special attention to current and enduring political issues which particularly affect women. (AP)

PUP 4520 Politics of Urban Transportation Decision-Making (5)
A study of urban transportation decision-making processes, with a special emphasis on citizen participation, mobilization of community support for/or against transportation policies, and interaction with local, state and federal officials. The course attempts to provide students with an understanding of the decision-making process with respect to the urban transportation policy planning. (AP)

PUP 5934 Topics in Public Policy (VAR)
An intensive examination of selected topics dealing with public policy. Subjects will vary, depending upon the desires of students and faculty. Allows the student to choose topics of particular interest to him or her. (AP)

PUP 6007 Seminar in Public Policy (VAR)
Graduate seminar on special topic in public policy analysis. Topic to be announced in advance.

Psychology Major

Gary Moran, *Professor and Acting Chairperson*
Edward Girden, *Distinguished Professor*
Milton Blum, *Professor*
Gordon Finley, *Professor*
Bernard Saper, *Professor*
Marvin Dunn, *Associate Professor*
James Flanders, *Associate Professor*
Fernando Gonzalez-Reigosa, *Associate Professor*
William Kurtines, *Associate Professor*
Janat Parker, *Associate Professor*
Benjamin Algaze, *Assistant Professor*
Patricia Baggett, *Assistant Professor*
Nancy Blaney, *Assistant Professor*
Lee Brownston, *Assistant Professor*
Luis Escovar, *Assistant Professor*
Arthur Flexser, *Assistant Professor*
Paul Foos, *Assistant Professor*
Mary Levitt, *Assistant Professor*
James Rotton, *Assistant Professor*

(Continued)

Psychology

Vincent Skotko, *Assistant Professor*
Ronald Fisher, *Visiting Professor*

LOCATION: Tamiami and North Miami Campuses

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:

Required Courses: introductory psychology

UPPER DIVISION PROGRAM:

Quarter Hours

Specific Required Courses in Psychology **14**

PSY 3043C 1. Advanced General Psychology 7
Lecture (2)
Laboratory (5)

Note: Lecture and Laboratory to be taken concurrently in junior year.

Prerequisites: STA 3122 must be taken before PSY 3043C.

STA 3123 must be taken before or concurrently with PSY 3043C.

2. Other advanced laboratory or field experience 7
(eg. CYP 4953, DEP 4704C, SOP 4649, INP 4055C, PPE 4325C, or SOP 4215C)

Note: To be taken during senior year.
Prerequisites: PSY 3043C, STA 3122, STA 3123 or permission of instructor.

Required Courses in Statistics **8**

1. STA 3122 (5)
2. STA 3123 (3)

Elective Courses in Psychology **at least 35**

Note: PSY 4693C is especially recommended for the student planning to take the psychology specialty part of the Graduate Record Examination.

Note: COP 3112 is recommended for students planning to enter graduate school.

Elective Courses Outside of Psychology **at least 10**

Distribution Requirements

Each student must take one course from each of the five areas A–E below. Note that, in each area, *either* a lecture course *or* a laboratory/field experience will suffice.

	Laboratory/Field Experience Options
Area A: Experimental	
EXP 4204	EXP 4404C
EXP 4605	EXP 5055C
PSB 3523C	
PSB 4003	
Area B: Social	
SOP 3004	SOP 4215C
SOP 4522	SOP 4719C
SOP 4525	
SOP 4842	
Area C: Community/Industrial/Consumer	
CYP 3003	CYP 4953
INP 3002	INP 4055C
SOP 4712	SOP 4649
SOP 4645	
Area D: Personality/Abnormal	
CLP 3003	PPE 4325
CLP 4144	
EXP 3304	
PPE 3003	
Area E: Developmental	
DEP 3001	DEP 4704C
DEP 3402	
DEP 4164	
DEP 4464	

Remarks: (1) The student is strongly urged to contact the Psychology Department for advisement in curriculum planning; (2) Limited funds are available through the Psychology Department to senior students with demonstrated scholastic ability and financial need; (3) A grade of "C" or better is necessary in all courses required for the major.

Bachelor's degree with honors:
Application must be made and departmental approval granted, before the third quarter of the junior year, to undertake an independent project which must be approved by and carried out under the supervision of a member of the Department. Upon completion of the study, a satisfactory oral defense of the work must be presented to a Department committee.

Note: the bachelor's degree offered in this program is a liberal arts degree and not a professional degree. While it is possible to concentrate courses in one's area of interest, it is not possible at the present time to obtain a "professional specialization" at the undergraduate level in psychology.

Graduate Study Master of Arts in Psychology

The Department of Psychology at Florida International University participates jointly with the Department of Psychology at Florida Atlantic University in offering the M.A. in Psychology. This joint program emphasizes work in General Experimental Psychology. Students entering the program must have a B.A. (or equivalent) and must satisfy the requirements for admission to the FAU master's program. Students may take part of their course work at FIU and may undertake the research under the supervision of an FIU faculty member. The degree is awarded by Florida Atlantic University. Students in the program must satisfy the FAU requirements for the M.A. in Psychology.

For information, write or call: Psychology Department, College of Science, Florida Atlantic University, Boca Raton, Florida 33431. Telephone (305)395-5100, extension 2582. To apply for admission, write to: Director of Admissions, Florida Atlantic University, Boca Raton, Florida 33431.

Master of Science in Community Psychology

The Department of Psychology currently offers graduate study for the degree *Master of Science in Community Psychology.* This graduate program provides scholarly, scientific and professional exposures, which are characteristic of both traditional graduate study within the general discipline of psychology, and modern innovative programming within the particular domain of professional psychology practiced in community settings.

The aim of the M.S. program in Community Psychology is to enable students to master three interrelated roles and functions by which the psychologist assists community agencies and groups to be more effective: those of the program evaluator, the human service consultant, and the psychosocial innovator. Students are trained to function as scientist-practitioners. They acquire basic and applied research, intervention, and evaluation skills required of all psychologists. In addition, they are exposed, during the 65 quarter-hours of graduate study, to specific content and methods courses in the main areas of community psychology practice. They engage in appropriate supervised field experiences, and complete a terminal master's project or thesis. They also select elective courses appropriate to their specialty interests in other fields of psychology and/or other units of the University.

The master's program in Community Psychology is, by virtue of its content and field experience requirements, considered a terminal professional degree program. It is expected that most graduates will seek immediate employment and not procede directly to a Ph.D. program. In light of these objectives, students earning the master's degree in Community Psychology are expected to achieve a greater breadth and depth of training than that usually obtained in programs at the master's level.

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Psychology

Admission Requirements

General: The Florida State University System requires that applicants for admission to graduate study achieve:

1. A bachelor's degree or equivalent from a regionally accredited university or college.
2. A "B" or better grade point average in all work undertaken while the candidate was registered as an upper division student for the baccalaureate degree, OR a total score (quantitative plus verbal) of 1.000 or higher on the Graduate Record Examination, or an equivalent score on some other measure specified by the University. The Department of Psychology requires that both GRE scores and official transcripts be submitted in order to ensure consideration for acceptance. In addition to these basic requirements, the Department reserves the right to require additional material.
3. Applicants should check with the Admissions Office to ascertain current requirements, since the objectives of academic and professional excellence sought by the Department of Psychology, and the intense competition among applicants for the limited number of graduate positions authorized, will result in increasing the effective requirements far beyond the University's "minimum."

Applicants to the program who are not psychology majors may be accepted conditionally until they meet the category I-IV requirements, listed below, early in their graduate career. A *maximum* of 15 quarter hour credits earned in the special student category exclusive of the prerequisite undergraduate courses may be applied to graduate degree requirements.

Undergraduate Courses: These requirements are designed to make certain that students accepted into graduate program have a broad base of dependable psychological knowledge and acquaintance with the basic methodologies upon which the discipline is founded.

CATEGORY I — Satisfactory completion of one *upper division* course or laboratory course in three of the following areas (or their equivalent) outside the area of graduate specialization.
- Developmental
- Social
- History, Systems, Overview
- Differential or Individual Differences (not statistics)
- Abnormal, Personality
- Community
- Industrial
- Motivation

CATEGORY II — Satisfactory completion of one psychology laboratory course. (Ordinarily this requirement will be made by taking a general experimental psychology laboratory course, such as PSY 3043C or its equivalent.)

CATEGORY III — Satisfactory completion of one basic experimental course from areas such as learning, conditioning, physiological, perception, memory or related areas (can include laboratory course but not general experimental laboratory).

CATEGORY IV — Satisfactory completion of introductory statistics.

Application Procedures for the Master of Science in Community Psychology

Students seeking admission to the graduate program in Community Psychology must complete the following steps:

1. Submit a graduate application for admission to the Admissions Office of Florida International University. Application forms will be mailed upon request.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the applicant's former institution(s) to the Admissions Office of Florida International University. Copies submitted directly by applicants are not accepted for application purposes.
3. Submit three recommendations from previous instructors.
4. Submit an essay stating reason for interest in the program.
5. Submit the results of the *Graduate Record Exam* (GRE) administered nationally by the Educational Testing Service (Box 955, Princeton, New Jersey, 08540).

Degree Requirements

To be eligible to receive the Master's degree, a student must satisfy (a) all University requirements for a Master's degree and (b) the specific requirements of an approved program of study.

All students in this program of study are expected to complete a 37 quarter-hour core course requirement. This core serves two functions: (1) To provide the student with the skills necessary to interpret and carry out research in the field; (2) to bring together some of the major intervention approaches of applied psychology within the framework of good and ethical practice. The core course sequence includes a 9 quarter-hour field or practicum experience and a master's project of 6 quarter-hours.

In addition to the core, students in Community Psychology are required to complete at least 28 quarter hours of courses, which focus on the major issues relevant to the settings in which community psychology is practiced. Students are expected to take electives either in the department or in other departments as appropriate to their program objectives.

Typical Program of Study

1. *CORE COURSES*
(required of all students)

STA 5126	Design of Experiments in Psychological Research	4 credits
STA 5707	Multivariate Analysis in Applied Psychology	4 credits
INP 6940	Strategies and Methods of Applied Psychological Research	4 credits
CYP 5526	Psychological Methods of Program Evaluation	4 credits
CYP 6936	Current Issues in Community Psychology	4 credits
CYP 6956	Field Experience in Community Psychology	9 credits
CLP 5931	Ethical Standards in Psychological Practice	2 credits
PSY 6971	Master's Project in Psychology	6 credits
		37 credits

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Psychology

II. *ADDITIONAL REQUIRED COURSES* (students must take at least *five* (5) of the following):

CYP 5535	Psychology of Institutional and Social Change	4 credits
CYP 6536	Principles and Methods of Psychological Consultation	4 credits
CLP 5185	Current Issues in Mental Health	4 credits
CYP 5515	Psychological Services Administration	4 credits
PSY 5939	Special Topics in Psychology	4 credits
SOP 5765	Psychology of Community Development	4 credits
CYP 5534	Small Groups as Change Agents	4 credits
SOP 5616	Social Psychology of Organizations	4 credits
DEP 5405	Psychological Processes of Maturing Adult	4 credits
*NEW COURSE	Seminar in Community Psychology	4 credits

III. *ELECTIVES*
(A student may taken up to 10 credits in other departments or may choose to take these 10 credits in the Psychology Department)

Grades, Credits, and Course Loads

The optimum recommended course load for full-time graduate students is 10 quarter hours per quarter. The recommended course load for working or part-time students is 5 quarter hours. Approval for exceptions must be obtained from the Chairperson of the Department of Psychology. Course work in which a grade below "C" is earned may not be counted toward the Master of Science degree. All work applicable to the master's degree must be completed within five years immediately preceding the awarding of the degree. A student may receive permission to transfer up to a maximum of 10 quarter hours of graduate credit to the degree program, provided that: 1) the course(s) were taken at the graduate level at an accredited college or university: 2) grade(s) of "B" or better were earned; and 3) the course(s) are judged by the faculty advisor to be relevant to the student's graduate program. Acceptable credit must not have been used toward another degree.

Academic Warning, Probation and Dismissal

WARNING: A student whose cumulative GPA falls below a 3.0, or who otherwise evidences that he or she is experiencing problems in the program, will be placed on WARNING indicating academic or practicum difficulties.

PROBATION: A student on WARNING whose cumulative GPA falls below 3.0 will be placed on PROBATION indicating serious academic difficulty.The Department will then communicate conditions which must be met in order for the student to continue to enroll.

DISMISSAL: A student on PROBATION whose cumulative and quarterly GPA falls below 3.0 will be automatically dismissed from his/her program and the University.

Course Descriptions

Definition of Prefixes
CLP–Clinical Psychology; CYP–Community Psychology; DEP–Developmental Psychology; EAB–Experimental Analysis of Behavior; EDP–Educational Psychology; EXP–Experimental Psychology; INP–Industrial and Applied Psychology; LIN-Linguistics; PCO–Psychology for Counseling; PPE–Psychology of Personality; PSB–Psychobiology; PSY–Psychology; SOC–Sociology; SOP–Social Psychology; SPA–Speech Pathology and Audiology.

CLP 3003 Personal Adjustment (5)
Study of personal adjustment in the social and occupational life of the individual. Emphasis on interpersonal aspects of effective behavior.

CLP 4144 Abnormal Psychology (5)(W,S)
Various forms of behavior pathology are examined in the light of traditional and current concepts of mental health and illness. Problems of diagnosis and treatment are discussed. The role of social mores is examined.

CLP 4374 Psychotherapy (5)
Current approaches to the treatment and improvement of psychological disorders are critically surveyed. Emphasis is placed on the examination of the various techniques of psychotherapy and behavior therapy. Broader strategies of prevention and mental health promotion, like consultation, counseling, and programmed agency services, are also studied.

CLP 5166 Advanced Abnormal Psychology (5)
Advanced study of the causes, psychopathology, manifestations, and social and personal consequences of behavior disturbance. Emphasis is placed on the critical examination of current research on the biological, psychological, and social aspects of these disorders. Clinical approaches to diagnosis, course, and prognosis in the contemporary mental health context (including "praticum" assignments if feasible) are covered.

CLP 5175 Personality Dynamics (5)(S)
A review of different approaches to the study of personality dynamics and of the related therapeutic modalities. Special consideration is given to psychoanalysis and neo-analytic psychology. Other therapeutic models which influence current psychological thought are also considered. Prerequisities: Successful completion of a course in theories of personality, or equivalent. Permission of instructor.

CLP 5185 Current Issues in Mental Health (5)
A critical, intensive examination of selected, important issues in mental health. Emphasis is given to the empirical study of contemporary problems related to the making of mental patients; planning, programming and administering mental health services; political, ethical and legal constraints on the operation of mental health facilities; interdisciplinary cooperation among helping and human service professionals; and evaluation of preventive care and treatment services. Prerequisite: Abnormal Psychology, or permission of the instructor.

CLP 5931 Ethical Code in Psychological Practice (2)
An examination of the ethical standards for psychological practice as established by the American Psychological Association, and the Association's standards for delivery of psychological services. Prerequisite: Admission to graduate study in psychology; (other graduate students admitted by permission of instructor).

CYP 3003 Introduction to Community Psychology (5) (F,S)
An introduction to the issues and scope of Community Psychology. Students will be exposed to the development of Community Psychology as a growing discipline. Particular emphasis will be placed on the role of the community psychologists as an agent of social change.

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CYP 4953 Community Psychology Field Experiences I (7)(F)
Students will be organized into task oriented teams or will work independently in the community, for the purpose of becoming familiar with various community institutions and developing an action plan for assisting institutions in implementing change. Prerequisite: Introduction to Community Psychology.

CYP 5515 Psychological Services Administration (4)
A broad survey of the function of administrative institutions in society, from a psychological perspective. Focuses on the psychological theories, concepts, and practices involved in administration, organization and delivery of human services. Emphasizes prosocial data involved in political functioning and administrative behavior in the public sector. Prerequisites: enrollment in graduate program at FIU; permission of instructor.

CYP 5526 Psychological Methods of Program Evaluation (4)
Development of skills for the psychological assessment, monitoring and evaluation of human service programs, with emphasis on the application of basic principles of behavioral science research in the field setting. Prerequisites: Admission to graduate study in psychology (other graduate students admitted by permission of instructor).

CYP 5535 Psychology of Institutional and Social Change (4)
A study of the theoretical basis of and strategies applied to the process of effecting social change in community institutions involved in the delivery of human services.

CYP 5954 Community Psychology Field Experiences II (7)(W)
Same orientation and description as Field Experience I. Students in this course will be able to pursue their work with community institutions in more depth. Prerequisite: Students enrolled in this course must have completed Community Psychology Field Experiences I.

CYP 6536 Principles and Methods of Psychological Consultation (4)
An analysis of the basic psychological approaches underlying consultation, with special emphasis on the practical application of the processes of learning, cognition, and interpersonal relations to techniques of consulting with various "target" agencies, individual clients, and other professionals in community settings. Prerequisite: graduate standing at FIU, or permission of instructor.

CYP 6936 Current Issues in Community Psychology (4)
An intensive analysis of contemporary theoretical, practical, and professional aspects of the field of Community Psychology. Topics discussed may lead to the graduate project required of each student. Prerequisites: Admission to graduate study in psychology (other graduate students admitted by permission of instructor).

CYP 6956 Field Experience in Community Psychology (VAR)
Placement of students in applied settings for the purpose of developing community-based experience in the application of theoretical and methodological approaches. Prerequisites: CYP 5535, CYP 5515, CYP 6936, CLP 5931, STA 5126, STA 5707.

DEP 3000 Human Growth and Development: Introductory Developmental Psychology (5)(F,S,SS)
An introductory study of the development of personality, intelligence, and motivation, from childhood to adulthood. Emphasis is on development of cognitive systems through social learning. The full life span of human growth and development will be considered.

DEP 3001 Psychology of Infancy and Childhood (5)(F,W,SS)
An introduction to human development focusing on infancy and childhood. Particular attention will be devoted to intellectual, personality, and social development. Consideration will be given to both theoretical and empirical perspectives.

DEP 3303 Psychology of Adolescence (5)(W)
An examination of psychological, sociological and biological factors contributing to the changes from childhood to adolescence, and from adolescence to young adulthood.

DEP 3402 Psychology of Adulthood (5)(W)
The transition from youth to middle age is studied. Focus is on changing roles in family, work, and societal settings, as these factors influence personality and other aspects of psychological function.

DEP 4044 Moral Development (5) (W,S)
The course is intended to be a critical survey of psychological theories and psychological research concerning the development of moral attitudes and behavior, and the application of research in moral development to social problems. Emphasis is given to those theories that have generated a substantial body of empirical research. The major theories to be reviewed include psychoanalytic theory (Freud, and the ego psychologists), cognitive developmental theory as it is applied to the development of moral judgment (Piaget, Kohlberg, etc.). and social learning theory (Aronfreed, Bandura, Hill, etc.).

DEP 4164 Children's Learning (5)(W)
Learning in infancy and childhood, with particular emphasis on simple conditioning, discrimination shifts, mediation, transposition, observational and concept learning. Prerequisite: Students enrolling in this course should have completed successfully at least one prior course in developmental psychology.

DEP 4204 Pediatric Psychology (5)
Aspects of normal and abnormal child care and child rearing are examined. Adult-child interaction in the home and in institutional settings is explored, and common problems of childhood discussed.

DEP 4213 Childhood Psychopathology (5)
Various forms of abnormal behavior in infancy, childhood and adolescence are examined, within the context of traditional and contemporary psychological theory. Problems of differential diagnosis and forms of remediation are discussed.

DEP 4464 Psychology of Aging (5)
An examination of the factors which contribute to the psychological profile characterizing old age. Biological and sociological components are considered, and their impact on perceptual, cognitive, and personality processes is analyzed.

DEP 4704C Developmental Psychology: Lecture (2) Laboratory (7)(S)
Laboratory/observation exercises illustrative of the concepts and research techniques used in developmental psychology. Particular emphasis is given to cognitive and social-cognitive development. This course is for seniors who have completed PSY 3043C and one developmental psychology course.

DEP 5145 Culture and Childhood (5)(W,S)
An examination of cultural and societal influences on children's motor, perceptual, intellectual, and personality development. Extensive readings in cross-cultural research literature serve as the focus for class discussions and independent projects. Prerequisite: Senior or graduate standing.

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Psychology

DEP 5405 Psychological Processes of the Maturing Adult (4)
An intensive examination of the literature dealing with the maturing adult, with particular emphasis on psychological considerations of career development, intellectual and personality evaluation, changing roles as applied to career choice, deparenting, and preparation for retirement. Prerequisite: Graduate standing. Seniors may be admitted by permission of instructor.

EAB 4794 Principles and Theories of Behavior Modification (5)(S)
Studies different approaches to the modification of problem behavior, through the application of learning principles and theories.

EAB 5655 Advanced Methods of Behavior Change (5)(F,S)
An intensive study of selected methods of modifying human behavior, emphasizing the applications of the principles of respondent and operant conditioning, as well as those derived from modern social learning theories. Practice and role playing opportunities are provided in behavior therapy, relaxation therapy, behavior modification, biofeedback or similar behavioral approaches. Prerequisities: EAB 4794, CLP 4374, CYP 4144; enrollment in an authorized program; equivalent background; or permission of instructor.

EDP 3004 Introductory Educational Psychology (5)(W,S,SS)
An introduction to the ways in which the principles of psychology apply to educational practices, considering aspects of basic processes such as development, learning, individual differences, and adjustment: with special reference to the problems of teacher effectiveness and teacher-student interaction. This course is designed for students who have not had a prior course in educational psychology.

EDP 6935 Special Topics in Educational Psychology (VAR)
An intensive analysis of a particular topic in education psychology. Students must have topics approved by the instructor prior to registration. Open only to advanced and graduate students in the School of Education.

EXP 3304 Motivation and Emotion (5)(F,W)
Introduces several perspectives from learning theory, perception, and personality theory to explore ways in which people move through their physical and social environment.

EXP 3652 Psychology of Creativity (5)
An exploration of the psychological processes involved in the act of creation. Several approaches to the understanding of creators and their creations are used, including the study of eminent creative people, and sessions with persons involved in creative efforts. A survey of scientific studies of creation, and personal involvement and introspection by the student.

EXP 4204 Sensation and Perception (5)(F)
Basic concepts in sensation and perception are explored, with an emphasis on models of peripheral and central neural processing. Topics such as receptor function, brightness and color vision, movement and object perception, perceptual memory and pattern recognition are considered. Psychophysical techniques, such as subjective magnitude estimation and signal detection theory, are covered.

EXP 4404C Human Learning and Remembering: Lecture (2) and Laboratory (5) (7)(S)
Lectures on the research and theoretical contributions to the understanding of human learning and remembering; and laboratory exercises illustrative of the concepts and techniques used in conducting experimental studies of human learning and remembering. Prerequisite: Advanced General Psychology with Laboratory (PSY 3043C).

EXP 4605 Cognitive Processes (5)(W)
Investigation of the mental processing underlying experiences and behavior. Topics include: games, puzzles, and problems; intuitive and creative thought; conceptualization, reasoning and clinical diagnosis; choices and decisions; conceptions of time and space; and thought in abnormal or altered states of consciousness.

EXP 4934 Current Experimental Theories (5)(F,S)
The stress in this course is on current specific theories determining the nature and direction of the research and interest in the several important areas, such as psychophysics, learning and remembering, developmental patterns and motivation, personality, etc. Topics to be covered will be announced at the beginning of the academic year. May be taken twice for credit toward the major.

EXP 5005C Advanced Experimental Psychology: Lectures and Laboratory (7)
Lecture and laboratory course investigating experimental research in the fundamental processes of human behavior. Includes perceptual, cognitive, and linquisitic processes. Prerequisites: PSY 3043C, STA 3122 and STA 3123.

EXP 5406 Theories of Learning (5)
The major theoretical systems of learning are covered, with the intent of determining how well each accounts for the phenomena of learning. Emphasis is placed on exploring the controversial issues raised by extant theories, and the experimental resolution of these theoretical controversies. The impact of theory on current thinking about learning is considered.

INP 3002 Introductory Industrial/Organizational Psychology (5)(F,W)
Introduction to the study of behavior in the work environment. Illustrative topics included formal and informal organization, work motivation, satisfaction and performance, leadership, job analysis, selection and performance evaluation, training and development.

INP 4055C Industrial/Organizational Psychology Lecture (2) and Laboratory(5) (7)
Students gain experience with the use of psychometric instruments in the areas of job analysis, personnel selection, performance appraisal, job satisfaction, criteria analysis, and management training and development. Prerequisites: Statistics, and Introductory Industrial/Organizational Psychology, or Personnel Psychology, or Personnel Management, are recommended.

INP 4203 Personnel Psychology (5)
Techniques and procedures applicable to the selection, placement, utilization, and evaluation of personnel in organizations are considered. The emphasis will be on empirical procedures, rather than the management function in the personnel area. Topics such as quantitive methods and models for selection, criteria analysis, performance appraisal, management training, and job satisfaction are discussed. Prior course in Statistics *strongly recommended.*

INP 6940 Strategies and Methods of Applied Psychological Research (4)
A practicum course in behavioral research, in which an investigation is planned, carried out, analyzed, and reported. Discussion is directed to single- and multiple-subject research; experimental, quasi-experimental, and non-experimental designs; obtrusive and unobtrusive measures; mathematical and logical tools for analysis of results; computer applications in data collection and analysis, and ethical considerations in research on human populations. Prerequisites: STA 5206 and STA 5707.

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Psychology

LIN 4701 Psychology of Language (5)(W)
An overview of the psychology of language and the psychological "reality" of linquistic structure. Behavioristic vs. cognitive views of psycholinguistics are examined. Consideration is given to the biological bases of language and thought, language acquisition, and language pathology.

LIN 4710 Language Acquisition (5)(S)
An examination of the way children acquire language, based on experimental findings from contemporary linquistic, psycholinquistics and behavioral theory.

PPE 3033 Theories of Personality (5)(F,S)
An examination of various theories of personality. Consideration is given to traditional and contemporary approaches to personality development.

PPE 3502 Psychology of Consciousness (5)
Normal and altered states of human consciousness are analyzed from the perceptual and neuropsychological viewpoint. Broad topic areas include physiologically determined levels of arousal, from deep sleep to intense excitement; selective attention; perceptual plasticity; illusions; sensory depriviation; biofeedback; psychosomatic disease; hypnotism and suggestibility; as well as a critical treatment of the phenomena of parapsychology.

PPE 4105 Humanistic Psychology (5)
Studies the methodology, research and findings of the humanistic orientation in psychology. Topics such as counseling, encounter groups, higher consciousness, biofeedback, intentional communities, education, mysticism and religion are examined from the humanistic viewpoint. Prerequisite: Prior completion of a course in Theories of Personality is recommended.

PPE 4325C Differential Psychology: Lecture (2) and Laboratory (5) (7)
Lectures and laboratory field experiences in the principles and methods underlying the administration, construction and evaluation of psychological tests. Practice in the administration and interpretation of selected psychological tests. Prerequisite: STA 3122, or an equivalent introductory course in statistics.

PPE 4514 Psychology of Dreams and Dreaming (5)
An in-depth examination of the most important psychological theories of dream function and of the use of dreams in different therapeutic approaches. The current research on the physiology and psychology of sleep is also evaluated. Prerequisite: Theories of Personality or its equivalent.

PPE 4604 Psychological Testing (5)
An introduction to the rationale underlying the use of psychological tests. Topics include basic test terminology, test administration, interpreting standard scores, reliability, validity, tests of intelligence, interest inventories, personality tests, the ethics of testing, and the fairness of tests for different segments of the population.

PPE 4930 Topics in Personality (VAR)(F,W,S,SS)
Special topics will be announced in advance.

PSB 3523C Memory and Memory Improvement (5)
This introduction to human memory considers the topic from a number of points of view. The following issues are addressed: the nature of memory and its phenomena; the capabilities and limitiations of an ordinary and an extraordinary memory; and the skills which can aid an ordinary memory.

PSB 4003 Introductory Bio-Psychology (5)(F)
A study of the more important psychobiologic correlates of behavior in basic psychological phenomena. Open only to majors in the senior year or otherwise qualified students.

PSY 3013 Introductory Psychology (5)(F,SS)
Psychological principles underlying basic processes such as perceiving, learning, thinking, motivation and emotions. Students are introduced to theories and research methods in terms of their contributions to contemporary psychology. Note: This course does not count towards the major in psychology. It is designed for non-majors and is a prerequisite for majors who have not had an introductory course in psychology.

PSY 3043C Advanced General Psychology with Laboratory: Lecture (2) and Laboratory (5) (7)(F,W,S)
An intensive lecture and laboratory course, designed to present the basic concepts and methods of traditional and contemporary psychology. Emphasis is placed on the role of methodology and experimentation in all phases of psychology. Students study sensory systems, information processing, perception, and other psychological processes. In addition to classroom experience, students participate in laboratory exercises designed to illustrate concepts covered in lectures. The laboratory exercises provides students with an opportunity to develop and use skills and techniques employed in the execution of human psychological experiments, while fulfilling laboratory course requirements in experimental psychology. Note: This course is required of all psychology majors and must be completed during the first year of residence. Prerequisite: STA 3122. Corequisite: STA 3123.

PSY 4693C Overview of Psychology (5)(W)
A consideration of the historical origins and developments of modern psychology as a viable discipline, in light of the major influences upon its growth. Prerequisite: 20 quarter hours in upper division psychology courses.

PSY 4900 Independent Readings in Psychology (VAR)
Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their study.

PSY 4914 Honors Research Project (VAR)
Limited to qualified seniors seeking honors in psychology. Students must submit a research plan and have a research advisor's approval of the research project prior to enrollment in the course. A written report of the research in the A.P.A. publication style must be submitted for evaluation before credit will be awarded.

PSY 4916 Independent Research in Psychology (VAR)
Limited to qualified students who have permission from a faculty member and who present a written proposal for research. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their research.

PSY 4930 Special Topics in Psychology (VAR)
Special topics will be announced in advance.

PSY 4931 Senior Seminar in Psychology (2)
An advanced seminary for seniors. Analysis of major contemporary trends in psychological theory and research.

PSY 4941 Independent Field Experiences in Psychology (VAR)
Limited to qualified students who have permission from a faculty member and who present a plan of study including area and objectives. Students enrolled in this course are expected to have regularly scheduled meetings with their faculty advisor, and to submit a written report of their experiences.

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Psychology

PSY 5126 Design of Experiments in Psychological Research (4)
Reviews the Analysis of Variance, and introduces the student to randomized and blocking designs, factorial designs, fractional factorial, main effects and other plans as they are used in psychological research. Main emphasis is on the rationale behind the several designs, and the techniques for applying these to psychological experiments. Prerequisites: STA 3122 and 3123, or their equivalents.

PSY 5707 Multivariate Analysis in Applied Psychological Research (4)
Covers basic techniques of multivariate analysis, emphasizing the rationale and applications to psychological research. Includes multiple regression, Hotellings T^2, MANOVA, principle component analysis and factor analysis. Prerequisite: STA 3123 or equivalent; linear algebra recommended.

PSY 5939 Special Topics in Psychology (VAR)(F,W,S,SS)
Special topics will be announced in advance.

PSY 6971 Master's Project in Psychology (VAR)
Terminal project leading to the M.A. degree, individually designed to meet each student's needs. Constitutes an original approach to a problem related to the discipline, and requires the submission of a final paper or equivalent work. Prerequisites: all required courses for the M.A. must be completed or in progress.

SOP 3004 Introductory Social Psychology (5)(F,W)
Introduction to the study of the relationship of the individual to social systems, including topics such as social behavior, attitude development and change, social conflict, group processes, mass phenomena, and communication.

SOP 3724 Psychology of Racism (5)(W)
Consideration is given to the nature and development of institutional racism in America. The historical, social, economic and psychological aspects of racism are examined.

SOP 3742 Psychology of Women (5)(F)
An examination of women from various perspectives, such as biological, anthropological, mythological, religious, historical, legal, sociological, and psycho-analytical points of view. Discussions of ways in which these various perspectives influence the psychological development of contemporary women.

SOP 3772 Psychology of Sexual Behavior (5)
An examination of the nature, development, decline and disorders of sexual behaviors, primarily from the perspectives of normal adjustment and interpersonal relations. Discussion also addresses love, intimacy, and similar emotionally charged sociopsychological topics. Modern and popular treatment approaches–including the "new sex therapies"–are critically evaluated.

SOP 3783 Black Psychology (5)
An examination of the social-psychological consequences of being black in America. This course focuses on contemporary black attitude(s) and their relationship to the historical, social and economic realities of the American blacks' sojourn in the U.S. Specific attention is given to the individual and the family, and their attitudes towards the broader social milieu.

SOP 3931 Psychology of Giving, Helping and Volunteering (5)
Theories, research data, and community applications of prosocial activities, such as giving, helping, volunteering and altruism.

SOP 3932 Psychology of Drugs and Drug Abuse (5)(W)
This course will cover some basic information about the nature and effects of drugs abused, the social and personal dynamics involved in the phenomena of drug abuse and the various rehabilitation programs currently being employed to combat drug abuse.

SOP 4015 Social and Personality Development (5)(W)
An examination of the genetic, familial, and societal factors influencing the development of a child's personality and his social behavior.

SOP 4215C Experimental Social Psychology: Lecture (2) and Laboratory (5) (7)(S)
The primary purpose of this course is to have students conduct actual social psychological experiments. Lecture material will be secondary to (and in the interest of) allowing students to execute representative experiments in areas such as attitude measurement and change, group structure and communication, etc.

SOP 4444 Attitudes and Ethnicity: A Cross-Cultural Psychological Approach (5)
Comparative study of the attitudes and practices of racial and ethnic groups toward each other in a variety of cultural and national settings.

SOP 4505 Theories of Human Relations (5)(S)
Research methods and findings on the topic of interpersonal interaction in face-to-face situations. Emphasis on content of research methods and findings, rather than in-class experiences.

SOP 4513 Psychology of Conflict (5)
This course examines the psychological factors involved in conflict situations. The focus is on intrapersonal, interpersonal and intergroup conflict resolutions, and the applicability of such resolutions to various conflict conditions. These may include racial or religious conflicts, and even international wars. The course also considers the ultimate disintegration of the individual personality as a result of internalized conflict, and attempts to familiarize students with the psychological factors underlying varying conditions of conflict and resolution.

SOP 4522 Social Motivation (5)
Focuses upon those sources of human motivation which are a consequence of man's social-interpersonal environment and his striving to obtain valued goals. Topics discussed include test-taking anxiety, alienation and affiliation motivation, internal vs. external orientation, achievement motivation, etc. The measurement of social motives and their roots and consequences for behavior are discussed.

SOP 4525 Small Group Behavior (5)(F,W)
Introduction to the study of the structure and function of groups, emphasizing the behavior of individuals as affected by the group. The course focuses on experimental evidence concerning such topics as social facilitation, group decision making, phases in group development, physical factors in group behavior, etc.; rather than upon student experience in sensitivity or encounter training.

SOP 4645 Consumer Psychology (5)(F,W)
This course addresses the psychological components contributing to satisfaction and dissatisfaction in buying and selling transactions. The consequences of such transactions, as they affect the environment in which we live as well as society in general, are examined. The interface between business, labor, government and the consumer–as all four groups are involved in consumer affairs–is analyzed objectively.

SOP 4649 Experimental Consumer Psychology (7)(S)
Using the interactional workshop and objective observational methods, students will be required to conduct original research projects related to solving consumer affairs problems. Laboratory requirements include both on- and off-campus work. The former emphasizes techniques and evaluation. The latter is necessary for the gathering of data.

SOP 4705 Psychology of Social Change(5)(W)
An examination of methods of implementing institutional change. Consideration is given to

(Continued)

Sociology

alternatives such as violent vs. non-violent confrontation, and the use of information as an instrument of change.

SOP 4712 Environmental Psychology (5)(W)
An introduction to the man-environment interaction, including psychological, sociological and physical aspects.

SOP 4715 Psychological Influence of Culture on Learning and Thinking (5)
An analysis of the research and theory relating cultural and societal influences of learning and thinking. Consideration is given to the controversies concerning assessment, individual and group differences. Prior course work in developmental psychology would be helpful.

SOP 4735 Psychological Aspects of International Relations and Conflict (5)(W)
A study of the psychological, especially social, factors in the dynamics of international behavior interactions, which may increase or decrease tensions and conflicts.

SOP 4842 Legal Psychology (5)
Particular emphasis will be given to interpersonal courtroom processes. Topics considered included scientific jury selection, proxemics, persuasive argumentation, witness demeanor, eyewitness testimony, and similar influences upon juror decision making. Prerequisite: None.

SOP 5058 Advanced Social Psychology (5)(W)
An in-depth examination of the role of social psychology in the social sciences and the major substantive problems as they relate to contemporary societal issues. Minimum Prerequisite: An introductory course in social psychology or its equivalent.

SPA 8401 Disorders of Language in Childhood (5)(F)
This course focuses on failures of children to acquire normal speech and language. The various causes of such disorders, and theories to account for failure to acquire language are considered. Techniques for assessing language disorders in children are evaluated. Students enrolling in this course should ordinarily have completed one course in development psychology.

Sociology Major

Sociology is part of the Department of Sociology and Anthropology and all information should be obtained from that Department's office.

LOCATION: Tamiami Campus

DEGREE: *Bachelor of Arts*

LOWER DIVISION PREPARATION:
Ninety quarter hours (60 semester hours) or the Associate of Arts degree from a community college; work should be pre-Arts and Sciences, or pre-Anthropology or Sociology if such programs exist. If the student does not have an AA degree, his background must reflect an ability to handle advanced academic work.

Required Courses: Introduction to cultural anthropology; or introduction to physical anthropology; or introduction to sociology.

Recommended Courses: (1) other anthropology or sociology courses (2) ecology, economics, geography, history, political science, psychology, (3) arts, biology, English, foreign language, mathematics, philosophy.

UPPER DIVISION PROGRAM:

	Quarter Hours
Required Courses:	45
Core Courses:	
ANT 3086 Anthropological Theories	5
SOC 3610 Sociological Theories	5
SOC 3500 Research Methods	5
SSI 3303 Ethical Issues in Social Science Research	5
Area Courses: either sociology or anthropology	25
Electives: with approval of the faculty advisor	45
	90

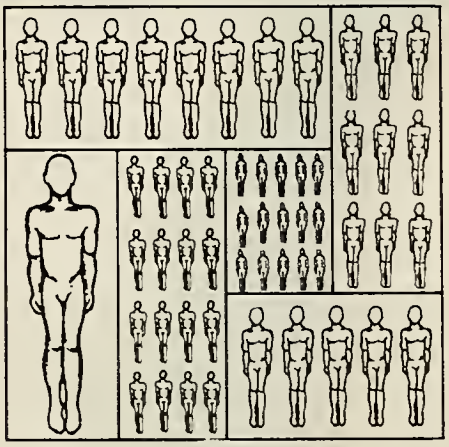
NOTE: A student with special interests may consult faculty advisors to plan an individualized program of study.

Field Work Experience—A meaningful understanding of anthropology and sociology can best be developed through the interplay between theory and research. Each student will be encouraged to work outside of the formal classroom under faculty supervision.

Minor in Sociology/Anthropology
Prescribed Courses:
25 credits in the Department of Sociology-Anthropology including the following:
2 courses chosen from among the four core courses required of department majors (ANT 3086 Anthropological Theories, SOC 3610 Sociological Theories, SOC 3500 Research Methods, and SSI 3303 Ethical Issues in Social Science Research).

Course Descriptions

Definition of Prefixes
ANT–Anthropology; DHE–Demography & Human Ecology; HUS–Human Services; LIN–Linguistics; MAF–Marriage & Family; SOC–Sociology; SSI–Social Sciences-Interdisciplinary.



ANT 3086 Anthropological Theories (5)
This course examines the process of theory building and explanation in the social sciences, and outlines the historical and philosophical foundations of anthropological thought. Theorists and schools of thought reviewed include: Darwin and evolution; Boas and historical particularism; Freud and culture and personality; and Malinowski and functionalism.

DHE 3101 Introduction to Population Analysis (5)
An introduction to the study of population analysis. Classifications by age, sex, occupation, or other criteria, and the significance of such data for analyzing major social trends are studied.

DHE 3300 Human Ecology (5)
An introduction to the adaptive processes social beings make to their environment, with particular emphasis on spatial distributions of interrelated social facts such as crime rates and population characteristics, or poverty and housing conditions. Current studies on social interrelationships and physical environments are introduced.

HUS 4413 Health and Welfare Delivery Systems (5)
A review of the varied systems servicing society's health and welfare needs. Attention is given to the institutional origins of such systems and their propensity for change and modification. Studies reflecting evaluative considerations for such systems are reviewed.

MAF 3210 Marriage and the Family (5)
An introduction to the intensive study of the kinship relationship of man known as the family. The family is distinguished from other social units, and behavior variations of this special unit are analyzed and associated with special functions. Contemporary manifestations of the family and the dynamic changes indicated are considered.

MAF 4510 Comparative Family Systems (5)
The study of family organization and function in selected major world cultures. Emphasis is given to the inter-relationships of the family, the economic system, urbanization, and human development.

(Continued)

Sociology

MAF 4511 Studies in Comparative Lifestyles (5)
A problem-oriented course emphasizing the differential behavior associated with categories such as nationalism, social class, income distribution, and political or religious affiliation.

SOC 3000 The Scope of Sociology (5)
Introduction to the field of sociology, with particular emphasis on scope and limitations. Basic but major divisions of the discipline are introduced. Vocabulary, conceptualizations, research approaches and vocational opportunities are reviewed. The relationship of theory and empirical study is stressed. (Also recommended for non-majors.)

SOC 3001 The Basic Ideas of Sociology (5)
The course introduces the student to the ideas of community, authority, status, alienation, and the sacred, as used in sociological literature.

SOC 3020 Social Problems (5)
An introduction to the concept of a social problem and the approaches used to understand more fully the total dimensions of some specific problems. Special emphasis is given to clarifying one's understanding of the underlying nature of selected social problems, an analysis of those aspects amenable to remedy, and an inventory of the knowledge and skills available.

SOC 3110 Social Deviancy (Deviant Behavior) (5)
The study of behavior that counters the culturally accepted norms or regularities. The social implications of deviancy are reviewed, and theoretical formulations regarding deviant behavior are analyzed.

SOC 3130 Delinquency (5)
An analysis of behavior which is extra-legal, with major concentration on its appearance among young people (juveniles) and society's response. Particular emphasis is given to the dynamic thrusts being made in establishing juvenile rights as a distinct part of human or civil rights.

SOC 3150 Criminology (5)
An introduction to the study of criminal behavior, its evidence in society, society's reaction to the subjects involved, and the current state of theoretical thought on causality and treatment.

SOC 3201 Social Institutions/Organization (5)
An introduction to more formalized behaviors that tend to provide accepted, orderly, and enduring procedures for groups which have more than narrow interests, and which perpetuate themselves. These institutionalized ways of behavior are associated with specific institutions and studied comparatively.

SOC 3281 School and Society (5)
A specialized course dealing with the place of schools (particularly public) in society, the import of social criteria for school personnel, and the influence of such criteria on educational processes within the school system (institution).

SOC 3300 The Community (5)
The social group known as the community is identified and analyzed for its distinctive qualities. By distinguishing it from other social groups, its dominating force on the behavior of its members is isolated. Attention is given to the interaction of individuals and groups as they exist within the community.

SOC 3380 Community Sociology Courses (5)
Special courses dealing with community programs such as Model Cities, voluntary organizations, United Fund, inner city schools, public service agencies. Faculty members come from community agencies, and course work focuses on local problems.

SOC 3402 Social Change (5)
The study of major shifts in focus for societies or culture, and the indicators associated with such changes. Particular attention is given to the development of industrial societies and the dynamics involved for nations emerging from various stages of "underdevelopment".

SOC 3424 The Social System (5)
The study of society as a system, the benefits of such a conceptual approach, and related theoretical constructs.

SOC 3500 Research Methods (5)
An introduction to the scientific method and its application to anthropological and sociological research. Topics include: formulation of research problems; research design; field methods and collection of data; hypothesis testing and interpretation of results.

SOC 3610 Sociological Theories (5)
Examines the emergence of sociology as the study of social relations. Compares and contrasts the work of selected theorists, with respect to their methodologies, treatment of the emergence and consequences of modern society, political sociology, conception of social class, and analysis of the role of religion in society. The student is expected to gain in-depth knowledge of opposing theories, as well as an appreciation of the contingent nature of sociological theories.

SOC 3820 Small Groups (5)
Survey of small group studies, their development and the associated theoretical schools of thought. The significance of small group studies for social theory is evaluated.

SOC 3828 Human Interaction Laboratory (5)
Laboratory designed for those persons seeking to increase their effectiveness in task-oriented problem-solving work groups. It explores processes for personal growth and development and human group interaction.

SOC 3830 The Individual in Society (5)
Introduction to the study of the individual as a social being, with particular emphasis on man's social origins, human perceptions, and the interaction of the individual and the group within society.

SOC 3850 Collective Behavior (5)
The study of human behavior as found in relatively unstructured forms, such as crowds, riots, revivals, public opinion, social movements and fads. The interplay of such behavior and the rise of new norms and values is analyzed.

SOC 3949 Cooperative Education in Social Sciences (5)
A student majoring in one of the Social Sciences (Economics, International Relations, Political Sciences, Sociology, or Psychology) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

SOC 4002 Basic Assumptions of Sociology (5)
An analysis of the basic assumptions underlying the different perspectives in sociology and anthropology.

SOC 4003 Sociology of the 20th Century (5)
An examination of the sociological implications evident in the events of our modern world. Heavy reliance is placed on intellectual materials other than social science, especially literature.

SOC 4004 Sociology Through Film (5)
Popular and documentary films as data for the analysis of various sociological problems.

SOC 4211 Sociology of Religion (5)
The study of religious institutions, their structure and function in various societies. Leadership qualities, participation and practices, and the relationship of religious institutions to other social institutions are studied.

SOC 4214 Seminar in Religion as a Social Institution (5)
An upper-level seminar in which two or more religious systems are compared in terms of their social origins and social-political consequences. Emphasis on the socio-economic-political impact of particular religious institutions such as the Black church in the United States, revitalization movements among Third World peoples, etc.

(Continued)

Sociology

SOC 4221 Political Sociology (5)
The underlying social conditions of political order, political process, and political behavior are explored. Examples are drawn from empirical and theoretical studies of power, elites, social class and socialization.

SOC 4230 Sociology of Medicine (5)
The social organization of medical institutions and the social factors associated with incidence of physical/mental illness and its treatment. Opportunity available for students to pursue specialized interests related to public needs and medical services.

SOC 4243 Sociology of Death (5)
An introduction to "death" as social phenomenon. Attention given to various approaches which systematically study death, with primary emphasis given to the sociological approach. Major attention is given to an exploration of attitudes toward death, and an assessment of the implications for the respective groups involved.

SOC 4251 Therapy as a Social Institution (5)
An analysis of psychotherapy from the sociological perspective. The effect of therapy on society and its functioning in society are analyzed. Comparable institutions in other societies are examined.

SOC 4265 Man, Society and Technology (5)
The study of contemporary society, man's role in it, and effects of technological change. A study of interrelationships, with special attention given to vocational study and instruction within the framework of the relationships perceived.

SOC 4271 Sociology of Science (5)
A sociological analysis of the generation, development, and consequences of science as a social institution.

SOC 4301 Community Organization (5)
An intensive study of how communities are organized, with special emphasis on the interactive processes of the varied components of a community. Special study, permitting students to concentrate on interest areas, is required.

SOC 4310 Urban Sociology (5)
Study of the urban community, with particular attention to the problems associated with urban life. The development of urban societies is reviewed historically, and factors associated with this development are identified.

SOC 4320 Rural Sociology (5)
The study of agrarian society, pre-urban, pre-city societies. Distinctive factors associated with such social life are identified; and particular attention is given to defining indicators associated with rural society.

SOC 4331 Latin American and Caribbean Social Structures (5)
Exploration of the types of social structures, statuses, and roles, and the resulting distributions of power and authority in the hemisphere.

SOC 4406 The Problem of Bureaucracy in The Modern World (5)
The course deals with the micro-sociological problems of the internal organization of bureaucracies; the relation between bureaucracy and personality; the macro-sociological problems of the emergence of the bureaucratic form; bureaucratization and contemporary life; general problems of affluence; meaningless activity; ways to beat the bureaucracy; and bureaucracy and atrocity.

SOC 4407 Macro-System Change Laboratory (5)
This laboratory uses a macro-systems approach to develop an understanding of human behavior and processes of social change operating on organizational, institutional, community and national levels.

SOC 4408 Heroic Elites (5)
A seminar devoted to attempts by selected Third World leadership groups to resolve perceived problems of underdevelopment and imperialism. Ideological justifications for such activities are analyzed. Prerequisites: ASC 3610 (SOC 4003, SOC 4613 recommended). Permission of instructor required.

SOC 4410 Social Stratification (Mobility) (5)
The study of society structured hierarchically with particular attention to the form and content of the various levels. Problems in the social order and differential human behaviors associated with stratification are analyzed.

SOC 4423 Comparative Social Systems (5)
The study of varied social systems, particularly as to those qualities regularly occurring in each and those which differ. Such variables are then analyzed for associational correlates to the systems studied.

SOC 4440 Social Conflict (5)
The study of conflict in society and its place in social relationships. A study of causes and resolutions, with particular emphasis on methods of resolution and their influence on social change.

SOC 4463 Imperial Development (5)
A seminar devoted to study of the relationship between colonialism and development in the contemporary Third World. Prerequisites: SOC 3010 (SOC 4003, SOC 4613 recommended). Permission of instructor.

SOC 4464 Sociology of the Underprivileged Societies (5)
An examination of the various theories concerning what is happening in the "underdeveloped world." The political, social, and economic events of these societies are subjected to sociological analysis.

SOC 4475 Seminar in Ethnicity (5)
An upper-level seminar, stressing a comparative sociological approach to the study of two or more racial-ethnic groups. Emphasis on the interrelations of ethnic communities within the same society and the socio-political effects of these interrelations. Prerequisite: Minorities, SOC 4745, or permission of Dept.

SOC 4480 Sociology and Social Planning
An analysis of sociological concepts, and their application to planning processes of society and its sub-units. Planning processes are critically reviewed for evidences of such application. Both micro and macro planning processes are correlated to specific sociological units of analysis.

SOC 4490 Area Studies: Social Structures and Problems (5)
Special courses on the social structures and related problems of specific geographical and cultural areas. To be offered at varous times.

SOC 4504 Basic Research Design (5)
Advanced course in social research, providing research practicum for studying patterns of human behavior: analyzing findings of studies, methodical and analytical procedures; reporting and explaining these results; and applying these inferences to concrete situations. Also acquaints the student with the use of computers in research in the behavioral sciences.

SOC 4540 Historical Sociology (5)
The authenticity and meaning of historical data for sociological research. Systematic theories in history are analyzed for their utility in sociology. Particular emphasis on the sociological uses of the comparative method in history.

SOC 4550 Seminar in the Social Scientist's Ethics (5)
An upper-level seminar emphasizing ethical considerations of import to the peculiar role and function of sociologists and anthropologists. Special attention to the interrelation of specific social scientific studies and their moral consequences, domestic and international. Prerequisite: SSI 3303.

SOC 4610 The Classical Tradition in Social Theory (5)
An examination of the classical theorists in sociology—included are Marx, Weber, Durkheim, Pareto, Toonies and Freud.

(Continued)

Sociology

SOC 4611 Advanced Social Theory (5)
An analysis of various classical and current sociological theories, with particular attention paid to their conceptions of man in society and the wider implications such conceptions have. The theories of Durkheim, Parsons, Weber, Goffman, Bendix and Dahrendorf are examined.

SOC 4613 Social Theory and Third World Innovations (5)
An examination of the contributions to social theory by intellectuals of the Third World. Particular attention is paid to theory derived from classical Marxism.

SOC 4620 Comparative Sociology (5)
A cross-cultural and cross-national survey of sociological studies, with particular emphasis on theoretical and methodological issues. Examples will be drawn from studies on culture patterns, social structures, sexual mores, power relationships and the ethical implications of cross-national research.

SOC 4640 Intellectual Precursors of Sociology (5)
An analysis of social ideas from which sociology emerged. The ideas of Aristotle, Hobbes, Rousseau, and Marx, among others, will be discussed as contributions to the emergence of sociology.

SOC 4652 Sociology of Sociology (5)
An analysis of the discipline of sociology and anthropology, using the tools developed by those disciplines themselves. The political, social and economic contexts of the field are examined to see how the discipline is used, for what advantages, and to what effect.

SOC 4653 Sociology of Utopia (5)
An analysis of Utopian thinking in sociology and anthropology, as well as the sociological implications of Utopianism.

SOC 4705 The Role of Women in Contemporary Society (5)
A concentrated study of women in society, addressing role origins and their development in contemporary society. Particular attention given to how such behaviors become normalized and the rapidity with which they change.

SOC 4741 Comparative Slave Societies (5)
A comparison of the structure and function of slavery as found in different areas of the world and at different periods of history.

SOC 4745 Minorities/Race and Ethnic Relations (5)
The study of social groups identified by racial or ethnic characteristics. Particular emphasis is given to the role of minorities in society, and the interactive process resulting from their contact with the majority. Social behaviors of minorities are reviewed and related to institutional structures and their accepted norms.

SOC 4746 Social Conflict in Multi-Ethnic Societies (5)
Cases are selected from a variety of societies with differing types of majority-minority situations. Prejudice and discrimination are seen as weapons in group and class conflict. The consequences of prejudice are analyzed in terms of the costs to every group in the society.

SOC 4829 Ethnomethodology (5)
The analysis of practical, everyday actions and circumstances as a means of reaching a logical and common sense knowledge of social structures.

SOC 4833 Role Theory (5)
An analysis of the relation between man and society, from the perspectives of role theory. The course explores the effect society has on individual biography and action.

SOC 4835 Clinical Sociology (5)
The problems of alienation, anomie, and happiness will be analyzed. A third position between social work and social change will be sought. Personal adjustment, social revolution, and individual calculation will be weighed as responses to the demands of social life.

SOC 4841 Mass Culture (5)
Analysis of the social, political and cultural impact of mass communications.

SOC 4842 Symbols and Society (5)
An analysis of the effect of culture on the individual and on society. The roles of popular and intellectual culture will be examined.

SOC 4905 Directed Individual Study (VAR)
Supervised readings and/or field research and training. May be repeated.

SOC 4931 Honors Seminar (5)
Permission of instructor required.

SOC 4941 Directed Field Research (VAR)
Permission of instructor required.

SOC 4949 Cooperative Education in Social Sciences (5)
A student majoring in one of the Social Sciences (Economics, International Relations, Political Science, Sociology, or Psychology) may spend several quarters fully employed in industry or government in a capacity relating to the major. Prerequisite: Permission of Cooperative Education Program and major department.

SOC 5140 Sociology of Law and Legal Processes (5)
An examination of the role of law and of legal institutions in American society. Included are such topics as the use and/or misuse of the legal process for conflict resolution and as agents of social change.

SOC 5255 Sociology of Mental Health (5)
A concentrated study of mental illness, with particular emphasis on definitional conceptualizations and the relationship of such to incidence data. Includes study of the social factors on the etiology of mental disorders and the epidemiology of such illnesses. Family effects of mental illness discovery and treatment are assessed, and mental health programs and their effectiveness are reviewed.

SOC 5261 Industrial Sociology (5)
Concentrated study of industrialization and the sociological theory involved. Manpower, unemployment, apprentice programs, and classificatory schemes are studied.

SOC 5264 Conflict Resolution: Society and Labor (5)
A concentrated study of conflict as evidenced in labor's relationship to society. The development of methods of resolution, and an assessment of prevailing approaches. Attention is given to the historical roots of labor's development as a distinct social entity, and the tensions precipated within different societies and their varied economic and political systems.

SOC 5284 Sociology of Education (5)
An analysis of education as a social process and the interrelationship of educational systems and society. The study of education as a socialization process; the social structure of education, and its role as an agent in social change.

SOC 5316 Advanced Urban Sociology (5)
A concentrated study of urban problems. Emphasis given to social policy and the role of public and private agencies in sustaining, administrating, and changing such policy. Urban problems are studied as an intermix of social, cultural, political, and economic factors. Methods of social cost analysis are discussed.

SOC 5656 Sociology of Knowledge (5)
The study of the theoretical basis of knowledge and the inter-relatedness of knowledge and social factors, particularly as knowledge relates to institutional forms of behavior.

SOC 5909 Directed Individual Study (VAR)
Supervised readings and/or field research and training. May be repeated.

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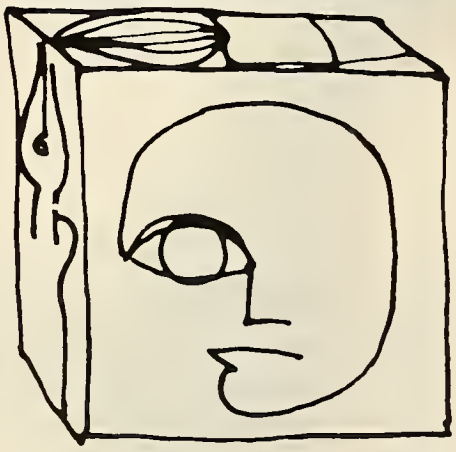
Visual Arts



SOC 5941 Directed Field Research (VAR)
Permission of instructor required.

SSI 3010 Introduction to Social Science (5)
An introduction to anthropology, psychology, and sociology; a survey of the similarities and differences in history, philosophy, and goals and techniques of research in these disciplines; and a review of modern interdisciplinary efforts.

SSI 3303 Ethical Issues in Social Science Research (5)
An introduction to the problems of possibilities of ethical premises in the perspectives and work of social scientists. Examination of historical interrelationships between moral philosophies and developing scientific methodologies. Analyses of contemporary social ethicists' attempts to assume moral postures while examining social relations. Case studies involving issues such as nation building in areas of accelerated change including Africa and Asia.

Visual Arts Major

Francis Wyroba, *Professor and Chairperson*
William Burke, *Associate Professor*
James M. Couper, *Associate Professor*
Ellen Jacobs, *Associate Professor*
R. F. Buckley, *Assistant Professor*
Richard Duncan, *Assistant Professor*
Barbara Forbes, *Assistant Professor*
William Maguire, *Assistant Professor*

LOCATION: Tamiami Campus Only
DEGREE: *Bachelor of Fine Arts*
LOWER DIVISION PREPARATION:

Required Courses: 6 semester hours of art survey or departmental exam; 6 semester hours of design or acceptable portfolio; 6 semester hours of drawing; 6 semester hours of beginning studio.

Recommended Courses: painting, sculpture, printmaking, ceramics, photography, weaving, cinematography.

Remarks: The student who does not have an A.A. degree and/or who lacks proficiency in required courses will be expected to take more than 90 quarter hours to complete the bachelor's degree, or to make up courses at the lower division level.

UPPER DIVISION PROGRAM:

	Quarter Hours
Required Courses:	60
ARH 4470 (Contemporary Art)	5
ARH 4800 (Criticism)	5
Art History Elective	5
Studio Major	25
ART 4955 Thesis and Portfolio	5
Studio Electives	15–35
Electives:	10–30
	90

Remarks: A grade of "C" or better in all courses required for the major is necessary for graduation.

Course Descriptions

Definition of Prefixes
ARH–Art History; ART–Art; HUM–Humanities.

ARH 3009 Survey of Contemporary Art (5)
A survey of the most recent developments in the fields of visual arts and architecture, through lectures, films and speakers. Open to all students.

ARH 4170 Greek and Roman Art (5)
Lectures, slides, visitors and student research.

ARH 4301 Renaissance Art (5)
Lectures, slides, visitors and student research.

ARH 4410 Modern Art (5)
Lectures, slides, visitors and student research.

ARH 4431 Nineteenth Century Painting (5)
A study of the various challenges offered artists at the beginning of the nineteenth century, and of subsequent solutions created by painters in America, England, France, Germany and Italy. Styles such as neo-classicism, romaticism, realism, eroticism, pre-rephaeliticism, luminism and impressionism will be examined.

ARH 4470 Contemporary Art (5)(F)
Lectures, slides, visitors and student research.

ARH 4552 Art of China and Japan (5)
An introduction to the art of China to the Ming Dynasty, and of Japan through the 18th century. The emphasis will be on painting and sculpture, with some ceramics and architecture.

ARH 4610 American Art (5)
Lectures, slides, visitors and student research.

ARH 4800 Theory and Criticism (5)(W)
Examinations, films, lectures and slides.

ARH 4905 Directed Studies (VAR)
A group of students with the approval of the art faculty, may select a master teacher of theory, research, or criticism in selected areas as film, painting, sculpture, architecture, crafts, art history, multi-media art, etc. Arrangements must be made at least a quarter before course is offered. (May be repeated.)

ARH 4910 Research (VAR)(F,W,S,SS)
Art history, criticism, and theory in areas not covered by the present program and which the student wishes to study. (Permission of instructor required. May be repeated).

ARH 4931 Women and Art (5)
Women in the history of art; past, present and future. Slides, lectures, films, panels and discussions.

ARH 5172 Greek and Roman Art (VAR)
See ARH 4170

ARH 5303 Renaissance Art (VAR)
See ARH 4301

ARH 5412 Modern Art (VAR)
See ARH 4410

ARH 5432 Nineteenth Century Painting (VAR)
See ARH 4431.

ARH 5470 Contemporary Art (VAR)
See ARH 4470

ARH 5555 Art of China and Japan (VAR)
See ARH 4552

ARH 5615 American Art (VAR)
See ARH 4610.

ARH 5812 Theory and Criticism (VAR)
See ARH 4800

ARH 5907 Directed Studies (VAR)
See ARH 4905

ARH 5913 Research (VAR)
See ARH 4910.

ARH 5931 Women and Art (VAR)
See ARH 4931.

ART 3111C Ceramics (5)(F,W,S,SS)
A beginning course for art and non-art majors. Fundamentals of throwing, hand building, and glaze application. (May be repeated)

ART 3133C Fabrics and Fibers (5)(F,W,S)
A creative approach to fabrics and fibers, using processes such as dyeing, embroidery, quilting, soft sculpture, batik, on and off loom weaving, etc. (May be repeated).

(Continued)

Visual Arts

ART 3150C Jewelry and Metals (5)(F,W,S,SS)
A study of basic metal techniques and strengthening of three-dimensional design concepts for the beginner. The advanced student will explore the more difficult technical aspects of areas such as hollow ware, enameling, casting, and stone setting. (May be repeated).

ART 3163C Glass Blowing (5)(W,S)
A basic course in off-hand glass blowing, concerned with preparing, forming, and finishing glass; understanding of glass as an art form; operation and maintenance of a glass studio. (May be repeated).

ART 3310C Drawing (5)(F,W,S)
Drawing will be considered as an essential part of every art student's curriculum. Depending on his lower level work, a student will be encouraged to take at least one drawing course at the University. Off-campus studio work may be arranged. (May be repeated).

ART 3331C Figure Drawing (5)(F,W,S,SS)
Drawing from the model during assigned studio time. Open to all students (May be repeated).

ART 3401C Printmaking (5)(F,W,S)
With a knowledge of basic intaglio and relief printing, the student will explore specific media such as etching, lithography, silk-screen, and other experimental techniques. (May be repeated).

ART 3510C Painting (5)(F,W,S,SS)
A study, through the use of visual aids and individual criticism, of the student's work. Any media may be used (May be repeated).

ART 3601C Photography (5)(F,W,S,SS)
With a knowledge of beginning developing, printing, and use of a camera, the art student will pursue his own direction with emphasis on individual approach, print quality, use of equipment, and criticism. (May be repeated).

ART 3630C Introduction to Filmmaking (5)
For the beginning student of filmmaking. Survey of the origins and development of cinematography as an art form. Presentation and technical analysis of selected films.

ART 3631C Film Production I (5)
Conceptual study of total filmmaking. Equipment, procedures, locations, sets, actors, and production staff will be examined from the point of view of the director. Student will conceptualize, shoot and edit a short film. Prerequisite: ART 3630, or permission of the instructor. (May be repeated.)

ART 3651C Video Art (5)
Studio experience in conventional and experimental video processing, with an emphasis on relating contemporary developments in art theory and criticism. An international exchange video tape bank and color-capable television facilities will be available (May be repeated.)

ART 3702C Sculpture (5)(F,W,S,SS)
With a background in beginning sculpture, the student will develop standards of excellence, both in concept and technique, with stress on individual expression. An equipped shop will be available to the student. (May be repeated.)

ART 3904C Directed Study (VAR)
A group of students, with the approval of the Art Department faculty, may select a master artist teacher and pursue a course of art study in selected areas such as graphic design, film, multi-media, environmental design, sound, etc. Arrangements must be made at least one quarter before course is offered. (May be repeated.)

ART 3905C Research (VAR)(F,W,S,SS)
Students may study or research an individual art project with an art faculty member. Complexity and amount of work will determine the number of credit hours granted. (May be repeated.)

ART 3949C Cooperative Education in Visual Arts (5)
A student majoring in Visual Arts may spend several quarters fully employed in industry in a capacity relating to the major. Must have permission of chairperson.

ART 4114C Ceramics (5)(F,W,S,SS)
The advanced student will explore all aspects of expression in clay and glaze. Students will be expected to be mostly self-directed. Prerequisite: ART 3111C, or permission of the instructor. (May be repeated.)

ART 4133C Fabrics and Fibers (5)(F,W,S)
See ART 3133C.

ART 4151C Jewelry and Metals (5)(F,W,S,SS)
See ART 3150C.

ART 4164C Glass Blowing (5)(W,S)
See ART 3163C

ART 4320C Drawing (5)(F,W,S)
See ART 3310C.

ART 4332C Figure Drawing (5)(F,W,S,SS)
See ART 3331C.

ART 4402C Printmaking (5)(F,W,S)
See ART 3401C.

ART 4532C Painting (5)(F,W,S,SS)
See ART 3510C

ART 4604C Photography (5)(F,W,S,SS)
See ART 3601C

ART 4632C Film Production II (5)
See ART 3631C.

ART 4652C Video Art (5)
See ART 3651C.

ART 4703C Sculpture (5)
See ART 3702C.

ART 4906C Directed Study (VAR)(F,W,S)
See ART 3904C.

ART 4910C Research (VAR)(F,W,S,SS)
See ART 3905C.

ART 4949C Cooperative Education in Visual Arts (5)
A student majoring in Visual Arts may spend several quarters fully employed in industry in a capacity relating to the major. Must have permission of instructor.

ART 4955C Thesis and Portfolio (5)(F,W,S,SS)
Work in the student's major area in a studio situation, resulting in a student exhibit. Arrangements must be made at least 3 quarters in advance of expected graduation date. Prerequisite: 25 hours of one studio area.

ART 5125C Ceramics (VAR)(F,W,S,SS)
See ART 4114C.

ART 5133C Fabrics and Fibers (VAR)(F,W,S)
See ART 3133C.

ART 5159C Jewelry and Metals (VAR)(F,W,S,SS)
See ART 3150C.

ART 5165C Glass Blowing (VAR)(W,S)
See ART 3163C.

ART 5340C Drawing (VAR)(F,W,S)
See ART 3310C.

ART 5341C Figure Drawing (VAR)(F,W,S,SS)
See ART 3331C.

ART 5403C Printmaking (VAR)(F,W,S)
See ART 3401C.

ART 5580C Painting (VAR)(F,W,S,SS)
See ART 3510C.

ART 5620C Photography (VAR)(F,W,S,SS)
See ART 3601C.

ART 5660C Video Art (VAR)
See ART 3651C.

ART 5730C Sculpture (VAR)
See ART 3702C.

ART 5907C Directed Study (VAR)(F,W,S,SS)
See ART 3904C.

ART 5910C Research (VAR)(F,W,S,SS)
See ART 3905C.

(Continued)

Caribbean-Latin American Studies

Caribbean-Latin American Studies Certificate Program

Director: Mark B. Rosenberg, *(Political Science)*

Associate Director: Mark D. Szuchman, *(History)*

Coordinating Council: Thomas Breslin, *(International Relations),* **Judson De Cew** *(Political Science),* **Lou Escovar** *(Psychology),* **Barry Levine** *(Sociology),* **Terry McIntosh** *(International Relations),* **Anthony Maingot** *(Sociology),* **Florentin Maurrasse** *(Physical Sciences),* **Raul Moncarz** *(Economics),* **William Vickers** *(Anthropology),* **Maida Watson** *(Modern Languages)*

LOCATION: Tamiami and North Miami

The Caribbean and Latin American Studies Certificate Program at Florida International University represents one way in which the University fulfills its commitment to furthering international understanding. The Certificate Program encourages students to take an interdisciplinary approach to the study of the Caribbean and Latin America. The Certificate is awarded to both degree and non-degree-seeking students who have successfully completed the Certificate requirements (see below). For students pursuing a bachelor's degree, the Certificate Program should be understood as a complement to the students regular major area or discipline of study. For non-degree-seeking students, who may enroll in the program under the university's "special student" designation, the Certificate Program represents one way in which a fuller, more complete understanding of the Caribbean and Latin America can be gained without pursuing a full course of study at the University.

Both degree and non-degree seeking students can enroll in the Certificate Program by applying directly through the Director or Associate Director. The student will then be assigned a faculty advisor familiar with both the major and/or Certificate requirements. The assigned advisor will meet with the student prior to each quarter's registration period to facilitate the student's progress toward the Certificate.

Upon completion of the Certificate requirements, the student's advisor will sign the completed Certificate course form and it will be transferred to the Certificate Director, who will award the Certificate.

The Certificate Program is one of the activities of the Caribbean-Latin American Studies Council (CLASC) of the University. As one of its functions, the Council promotes and integrates courses that have primary content on the Caribbean and/or Latin American areas. The courses to be included in the Certificate Program will reflect the expertise of the faculty, and will therefore vary over the years.

Certificate Requirements: (Total of 30 quarter hours):

1) A minimum of 25 quarter hours with a grade of "C" or better in courses certified by the Program. Courses must be taken from at least three different departments.
2) The introductory language sequence in Spanish, Portuguese, or French; or exemption through demonstrated proficiency as determined by the Department of Modern Languages. (The language sequence will not count toward the 30 quarter hour requirement.)
3) Five quarter hours of independent study under faculty supervision, during which a research paper will be written.

After fulfilling all requirements, students will participate in a colloquium with the faculty to discuss their research.

The following courses are currently being offered and fulfill Certificate requirements. These courses should not be understood as a complete list; students should consult with the Director of the Certificate Program about current course offerings.

Remarks: A grade of C or better in all courses required for the major is necessary for graduation.

Course Descriptions

Definition of Prefixes

ANT–Anthropology; CPO–Comparative Politics; ECO–Economics; ECS–Economic Systems & Development; FRE–French Language; FRW–French Literature (Writings); DEA–Geography–Regional (Area); GLY–Geology; INR–International Relations; LAH–Latin American History; PHH–Philosophy, History of; POW–Portuguese Literature (Writings); REL–Religion; SOC–Sociology; SPN–Spanish Language; SPW–Spanish Literature (Writings).

ANTHROPOLOGY

ANT 3144 Prehistory of the Americas

ANT 3251 Peasant Society

ANT 4324 Many Mexicos

ANT 4332 Latin America

ANT 4340 Cultures of the Caribbean

ANT 4343 Cuban Culture and the Revolution

ANT 4362 Maya Civilization

ANT 4930 Research in Maya Civilization

EARTH SCIENCES

GLY 3157 Elements of Caribbean Geology

GLY 4190 Caribbean Earth Sciences Seminar

GLY 4792 Caribbean Mineral Resources Field Trip

GLY 5620 Caribbean Stratigraphic Micropaleontology

GLY 5793 Caribbean Shallow-Marine Environments

ECONOMICS

ECO 4701 World Economy

ECO 4733 Multinational Corporations

ECS 3402 The Political Economy of South America

ECS 3440 Economics of Central America

ECS 4013 Economic Development

ECS 4403 The Latin American Economies

ECS 4403 Las Economias Latinoamericanas

ECS 4404 Economic Integration–Latin America

ECS 4430 The Economic Development of Cuba–Past and Present

ECS 4432 Economic Integration–Caribbean

ECS 4433 Economics of the Caribbean

HISTORY

LAH 3410 Mexico and the Caribbean

LAH 3482 Modern Cuba

LAH 4132 Colonial Latin America: The Formative Period

LAH 4133 Colonial Latin America: The Mature Period

LAH 4201 Latin America: The 19th Century

LAH 4300 Latin America: The Modern Period

LAH 4474 Topics in Caribbean History

LAH 4511 Argentina: 1776–Present

LAH 4932 Topics in Latin American History

(Continued)

Consumer Affairs

INTERNATIONAL RELATIONS

CPO 3326 Population and Geography of the Caribbean

GEA 3400 Population and Geography of Latin America

INR 3245 International Relations of Latin America

INR 3246 International Relations of the Caribbean

INR 4247 Caribbean Regional Relations

MODERN LANGUAGES

The following courses may be taken in French (FRE), Portuguese (POR), or Spanish (SPN):

FRE 3500, SPN 3500 Civilization I
(Caribbean-Latin American course)

FRE 4501, SPN 4501, Civilization II
(Caribbean-Latin American course)

FRW 3520, SPW 3520 Prose and Society
(Caribbean-Latin American course)

FRW 3580, SPW 3580 Intellectual History
(Caribbean-Latin American course)

POW 4930 Special Topics
(Caribbean-Latin American course)

PHILOSOPHY AND RELIGIOUS STUDIES

PHH 3042 Latin American Philosophies

REL 4481 Contemporary Latin American Religious Thought

POLITICAL SCIENCE

CPO 3303 Government and Politics of South America

CPO 3304 Theories of Latin American Politics

CPO 3323 Government and Politics of the Caribbean

CPO 3333 Government and Politics of Central America

CPO 4005 Topics in Comparative Politics

CPO 4055 Authoritarianism

CPO 4327 Topics in Caribbean Politics

CPO 4360 Cuban Politics

INR 4244 Latin America in International Politics

SOCIOLOGY

SOC 4331 Latin American and Caribbean Social Structures

SOC 4490 Area Studies: Social Structures and Problems

SOC 4613 Third World Theory

SOC 4746 Social Conflict in Multi-Ethnic Societies

Consumer Affairs Certificate Program

Director: Milton L. Blum *(Psychology)*
Coordinating Committee: Myrna Crabtree *(Home Economics Education),* **Dennis Marzella** *(Hospitality Management),* **Betty Morrow** *(Home Economics),* **Samuel Shapiro** *(Mathematical Sciences).*

LOCATION: Tamiami Only

With the collaboration of all the academic units and the approval of the Vice President for Academic Affairs, the Consumer Affairs Institute administers a Consumer Affairs inter-disciplinary Certificate sanctioned by the College of Arts and Sciences of Florida International University.

The increasing number of issues and conflicts involving consumers, business, government, and labor demand study and research so that more appropriate resolutions can be achieved. The Certificate Program in Consumer Affairs is intended to provide a sound educational base for those dealing with consumer affairs matters –be they buyers or sellers. The courses leading to the Certificate can serve those pursuing careers in consumer affairs, and provide personal benefit to individuals in their roles as consumers.

The Certificate Program is intended to provide business, government, industry, and labor with a resource for educating selected personnel in a broad range of subject matter related to consumer affairs.

A Certificate in Consumer Affairs will be awarded upon satisfactory completion of thirty credits from the courses listed in the Certificate requirements. Completed courses are recorded on a University transcript. These courses may be taken by Special Students with the advice of the Certificate Program Director. Special Student enrollment and course registration can be completed simultaneously at the time of registration. Students can be admitted to the Program at the beginning of any quarter.

Course Descriptions

Definition of Prefixes
COA–Consumer Affairs; ECO–Economics; EVR–Environmental Studies; FOS–Food Science; HUN–Human Nutrition; MAR–Marketing; PHI–Philosophy; PSY–Psychology; PUP–Public Policy; SOP–Social Psychology.

Required Courses: The following are the 22 credits of required courses.

SOP 4645 Consumer Psychology (5)
Factors that cause satisfaction and dissatisfaction in buying and selling transactions, and their environmental effects. Analysis of interactions between business, labor, government and the consumer.

SOP 4649 Experimental Consumer Psychology (7)
This course emphasizes original research on the part of the student, using the methodologies of the Interactional Workshop and the Observational Guide.

COA 3410 Consumer Resources (5)
Evaluation of information needed by consumers to make wise spending decisions, including sources of consumer help, information and protection. Experiences in product comparison provided.

COA 4460 Consumer and Technology (5)
Study of the inter-relationship of the consumer and the industrial/business community, including the roles and responsibilities of each. Special topics include the effectiveness of decisions on product cost, life styles and the environment, as well as the role of government in the marketplace.

ELECTIVE COURSES: Eight (8) hours are to be chosen, from the following courses. However, in addition, the student may be permitted to select alternative consumer-oriented courses in his or her major department of study.

ECO 3043 Consumer Economics (5)
Effects of public policy on family incomes and expenditure patterns. Consumer behavior, advertising, and other influences affecting demand. The consumer protection movement.

EVR 3011 Environmental Science (5)
For non-science majors. An introduction to the fundamental principles and concepts of ecology; and to air pollution and water resources.

EVR 3012 Environmental Science II (5)
For non-science majors. An introduction to energy resources and conservation; agricultural pollution; noise pollution; and solid waste problems.

FOS 3004 Food and the Consumer (4)
Survey of nutrition information relating to problems and issues of concern to today's consumers.

HUN 3122 Nutrition and Culture (4)
Nutrients and their interrelationships, in reference to food habits and needs of various population groups. Introduction to the impact of culture on nutrition, and study of personal food pattern development.

(Continued)

Ethnic Studies
LinguisticStudies

MAR 4503 Consumer Behavior (5)
The consumer as the basis for development of marketing programs by business organizations.

PHI 4631 Ethical Issues in Business (5)
Ethical dimensions of current problems and issues facing the worker or business manager.

PUP 4203 Environmental Politics and Policy (5)
Steps in the environmental policy-making process whereby private preferences are transformed into public policy.

COA 4440 Consumer Counseling (5)
Application of consumer and management knowledge and skills in financial decision making. Case study approach. Prerequisites: COA 3410, HME 4210, and permission of instructor.

COA 5450 Consumer Legislation (5)
Presentation of scope, enforcement and problems related to consumer law at the local, state and federal levels.

PSY 4941 Independent Field Experience in Psychology (VAR)

Ethnic Studies Certificate Program

Director: John F. Stack, Jr. *(Political Science).*
Coordinating Committee: Ralph S. Clem *(International Relations),* **Anthony P. Maingot** *(Sociology/Anthropology),* **Mark D. Szuchman** *(History).*

LOCATION: Tamiami Campus only

The College of Arts and Sciences offers the student a program in ethnic studies, in recognition of the place ethnic studies enjoys in the social sciences and humanities, and the importance of ethnic studies in today's world. The program seeks to establish a proper balance between its academic goals and objectives and the ongoing concerns of the University's local and international constituencies. The Program contains four specialized areas: Black Studies, Jewish Studies, Cuban Studies, and Comparative Studies.

The Certificate in Ethnic Studies is awarded with a bachelor's degree or upon completion of Certificate requirements, to a student who already possesses that degree. The Certificate will specify the area of concentration chosen by the student.

A student may acquire the Certificate in Ethnic Studies by fulfilling the following requirements:

General Requirements

1. A minimum of 30 quarter hours with a grade "C" or better.
2. Courses in both the "Core" and "Specialized" areas (indicated below) must be taken from at least two different departments.
3. A maximum of 5 quarter hours in a relevant language will be accepted.
4. A maximum of 10 hours of independent study will be accepted.
5. The Program Director must approve the student's overall plan and all special topics courses must be approved by Certificate advisors in each area.

The Program is especially eager to encourage programs of study abroad and field work in general. Credit for such programs will be awarded on an individual basis after evaluation by the Director and the Coordinating Committee, but in no case will it consist of more than 15 credit hours towards the Certificate.

Specific Requirements

1. A core of a minimum of two to three courses of a theoretical and conceptual nature in the area of ethnic studies
2. A minimum of three to four specialized courses in one of the four distinct areas:
   a) Black Studies
   b) Jewish Studies
   c) Cuban Studies
   d) Comparative Studies

Definition of Prefixes

AML–American Literature; ANT–Anthropology; ECP–Economic Problems and Policy; ECS–Economic Systems and Development; FOL–Foreign and Biblical Languages; GEA–Geography - Regional Area; HIS–History - General; INR–International Relations; LAH–Latin American History; LIT–Literature; MUH–Music: History/Musicology; POS–Political Science; PUP–Public Policy; REL–Religion; SOC–Sociology; SOP–Social Psychology.

Core Courses: SOC 4745 or ANT 4451: Minorities; PUP 4314: Ethnic Politics; INR 4084: Ethnic Conflict in Transnational Politics; INR 4024: Ethnicity and Nationality; ECP 3144: Economics of Race and Sex Discrimination; SOP 4444: Attitudes and Ethnicity.

Specialized Courses: (Note: this is not an exhaustive list; students should consult with the Director of the program on current offerings.)

Specialized Courses in Cuban Studies:

ECS 4430	The Economic Development of Cuba
FOW 4390	Genre Studies (with reference to Cuban Literature)
INR 3246	International Relations of the Caribbean
LAH 3930	Cuban History
SOC 4331	Latin American and Caribbean Social Structures
SOC 4613	Third World Theory

Specialized Courses in Black Studies:

AML 5212	Major American Literary Figures
ANT 4315	Afro-American Anthropology
ANT 4352	Area Studies
LIT 4203	Regional Literature in English
LIT 4930	Special Topics
MUH 3116	Evolution of Jazz
SOC 4746	Social Conflict in Multi-Ethnic Societies

Specialized Courses in Jewish Studies:

GEA 3630	Population and Geography of the Middle East
INR 3274	International Relations of the Middle East
POS 4147	Political Urban Jewish Leadership
REL 3224	The Prophets

Linguistic Studies Certificate Program

Director: Lynn Berk *(English)*
Coordinating Committee: Reinaldo Sanchez *(Modern Languages),* **John Jensen** *(Modern Languages),* **George Kovacs** *(Philosophy), and* **John Staczek** *(Secondary Education).*

LOCATION: Tamiami Campus Only

The University does not offer an undergraduate degree in linguistic studies, but it does provide a Certificate acknowledging that a student has demonstrated competence in course work pertaining to the study of linguistics. This certificate is designed to meet the needs of those who have a general interest in linguistic studies, as well as those for whom work in linguistics would assist in career planning or advancement.

A student can acquire a Certificate in Linguistic Studies by fulfilling the following requirements:

(1) The successful completion of at least six courses (30 quarter hours) in linguistics or linguistic-related courses. These courses are listed below.
(2) Courses must be selected from at least two different departments. It is recommended that courses be selected from three departments. Students should consult their Certificate advisor in selecting courses.

(Continued)

Marine Science

(3) With the advice of the Coordinating Committee, the student is encouraged to attain some degree of proficiency in a language other than his/her native language.

In addition to the requirements noted above, all of the requirements for obtaining a bachelor's degree in the College of Arts and Sciences or in one of the professional schools must be met, including the majors and minors appropriate to that degree.

A Coordinating Committee, representing various fields and consisting of faculty engaged in the teaching of one or more courses in linguistic studies will advise students and grant the Certificate.

A student wishing to earn a Linguistics Studies Certificate will choose courses from the following list of offerings:

Definition of Prefixes

ENG–English, general; FOL–Foreign Languages; FRE–French; LIN–Linguistics; MHF–Mathematics, History & Foundations; PHI–Philosophy; SPA–Spanish.

Required Courses:

1. LIN 3010 Introduction to General Linguistics (5 credits) *OR* ENG 3500 English Linguistics (5 credits)
2. FOL 4930 Special Topics: Spanish Grammar (5 credits) *OR* ENG 4555 Modern English Grammar (5 credits)
3. One of the following courses:
   LIN 3642 Language and Culture (5 credits)
   LIN 4701 Psychology of Language (5 credits)
   LIN 4710 Language Acquisition (5 credits)
   LIN 5934 Special Topics: Sociolinguistics (5 credits)
   PHI 4221 Philosophy of Language (5 credits)
   PHI 4222 Philosophy of Dialogue (5 credits)

Remaining courses for the Certificate will be selected from the following list:

Anthropology
LIN 3642 Language and Culture (5 credits)

English
ENG 3500 English Linguistics (5 credits)
ENG 4574 Black English (5 credits)
LIN 3400 Applied Linguistics (5 credits)
ENG 4555 Modern English Grammar (5 credits)
ENG 5517 History of the English Language (5 credits)

Modern Languages
FRE 3780 Phonetics (5 credits)
LIN 3400 Applied Linguisitcs (5 credits)
LIN 3010 Introduction to General Linguistics (5 credits)
SPN 3780 Phonetics (5 credits)
SPN 3840 History of the Language (5 credits)
FOL 3732 Romance Linguistics (5 credits)
SPN 4790 Contrastive Phonology (5 credits)
SPN 4800 Contrastive Morphology (5 credits)
LIN 4418 Problems in Language Learning (5 credits)
LIN 4620 Studies in Bilingualism (5 credits)

Philosophy
PHI 4221 Philosophy of Language (5 credits)
PHI 4222 Philosophy of Dialogue (5 credits)

Psychology
LIN 4701 Psychology of Language (5 credits)
LIN 4710 Language Acquisition (5 credits)
SPA 5401 Disorders of Language in Childhood (5 credits)

Mathematics
MHF 4302 Mathematical Logic (5 credits)

Marine Science Certificate Program

Director: W. M. Goldberg *(Biological Sciences)*
Coordinating Committee: J. Makemson *(Biological Sciences)* **P. McLaughlin** *(Biological Sciences)* **F. Maurrassee** *(Physical Sciences)* **J. Sheldon** *(Physical Sciences)* **A. Thorhaug** *(Biological Sciences)* **M. Tracey** *(Biological Sciences)*

LOCATION: Tamiami Campus Only

The Marine Science Program is designed to meet the needs of students whose general interests are geared to the natural sciences, environmental sciences or engineering. The traditional disciplines of biology, chemistry, physics and geology are reflected in the four courses required for the certificate in marine sciences. The broad background, in turn, prepares students for work in technical fields, for advanced graduate work, or for secondary school teaching. The certificate is awarded to both degree and non-degree seeking students who have successfully completed the requirements listed below.

Definition of Prefixes

EVS–Environmental Sciences; GLY–Geology; MCB–Microbiology; OCB–Biological Oceanography; OCC–Chemical Oceanography; OCE–Oceanography; ZOO–Zoology.

Certificate Requirements:

LOWER OR UPPER DIVISION PREPARATION:
2 quarters of inorganic chemistry with laboratory; 2 quarters of biological sciences with laboratory.

UPPER DIVISION PROGRAM:*

Required Courses:

		Quarter Hours
OCB 3010	Biological Oceanography	5
OCB 3010L	Biological Oceanography Lab	2
GLY 4730	Marine Geology	5
GLY 4730L	Marine Geology Lab	1
OCE 3014	Physical Oceanography	5
OCC 3002	Chemical Oceanography	5
OCC 3002L	Chemical Oceanography Lab	2
		25

Plus Two of the Following Electives:

MCB 4733+L	Marine Microbiology	7
GLY 5793	Caribbean Shallow-Marine Environments	5
ZOO 3253+L	Marine Invertebrate Zoology	7
EVS 3268	Marine Technology	5
OCB 5635+L	Coral Reef Ecology	7
ZOO 5625+L	Biology of Crustaceans	8
EVS 3420	Environmental Instrumentation	5

*All required courses require a grade of "C" or better.

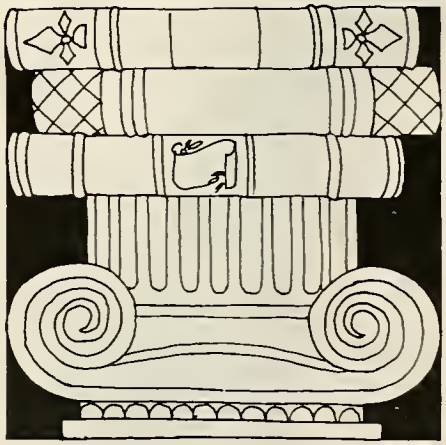
Western Social and Political Thought Certificate Program

Director: Brian Nelson *(Political Science)*
Coordinating Committee: Charles Elkins *(English)*, **Bruce Hauptli** *(Philosophy/Religion)*, **Antonio Jorge** *(International Relations)*, **Eric Leed** *(History)*, **Barry Levine** *(Sociology)*.

LOCATION: Tamiami Campus Only

(Continued)

Western Social and Political Thought



The certificate program provides interested students with a broad background in the history of western social and political thought. As such, the certificate student will be expected to take courses from a variety of disciplines and at least three tutorials. Each tutorial will concentrate on one prescribed book which will be the same for all students. At the beginning and end of each quarter the students will meet as a group with the instructors in the program to discuss the different perspectives which they have developed on the common subject matter.

Certificate Requirements: A total of 31 units in prescribed certificate courses with a grade of "C" or better:

(1) 20 units of course work in three historical eras (Ancient-Medieval, Modern, and Contemporary) from at least three different departments (Economics, English, History, Philosophy/Religion, Political Science, Sociology/Anthropology). See course listing below.
(2) 5 units of IDS 4920, Liberal Studies Colloquium on "Visions of Order and Revolt".
(3) 6 credit hours of independent study tutorials taken in three 2 credit hour blocs.

Advising Procedures: The student's advisor will be the designated certificate representative in his or her major. Students interested in the program may find their advisor listed above under "coordinating committee". It is the function of the certificate advisor to aid students in the selection of relevant courses, to insure that all certificate requirements have been completed before graduation, and to assign the tutorial grades. Students who are majoring in a discipline other than those listed will be advised by the director of the certificate program.

Course Listing: The following list may be modified from time to time, and new courses added. The student should consult with his or her advisor about current course offerings.

Ancient-Medieval

EUH 3420 Greece and Rome

LIT 4401 Literature Among the Arts and Sciences**

PHH 3100 Ancient Philosophy

PHI 3401 Social and Political Philosphy*

PHM 4400 Philosophy of Law*

POT 3013 Ancient and Medieval Political Theory

POT 4930 Topics in Political Theory**

POT 5934 Topics in Political Theory**

Modern

ENL 4137 Shakespeare's Histories

ENL 4138 Shakespeare's Comedies

ENL 4139 Shakespeare's Tragedies

EUH 3142 Renaissance and Reformation

EUH 3452 French Revolution and Enlightenment

EUH 4200 Early Modern Europe I 1500-1650

EUH 4286 Topics in European Intellectual History

LIT 3510 Themes in Literature

LIT 4401 Literature Among the Arts and Sciences**

PHH 3200 Medieval Philosophy

PHI 3401 Social and Political Philosophy*

PHM 4400 Philosophy of Law*

POT 3054 Modern Political Theory I

POT 4204 American Political Thought*

POT 4930 Topics in Political Theory**

POT 5934 Topics in Political Theory**

SOC 4640 Intellectual Precursors of Sociology

Contemporary

AMH 3331 American Intellectual History

AMH 3332 American Intellectual History

ECO 3303 The Development of Economic Thought

ECO 4307 Radical Political Economy

EUH 4286 Topics in European Intellectual History

LIT 4401 Literature Among the Arts and Sciences**

PHI 3401 Social and Political Philosophy*

PHM 4400 Philosophy of Law*

PHP 4510 Marxism

POT 3064 Contemporary Political Theory

POT 4055 Modern Political Theory II

POT 4302 Political Ideologies

POT 4204 American Political Thought*

POT 4930 Topics in Political Theory**

POT 5934 Topics in Political Theory**

SOC 3001 The Basic Ideas of Sociology

SOC 3610 Sociological Theories

SOC 4221 Political Sociology

SOC 4611 Advanced Social Theory

* Thematic Courses that cover more than one historical period.

** Depending on subject taught, these courses may cover one or more than one historical period. Students should consult their advisors before enrolling.

College of Arts & Sciences

Dean	**James A. Mau**
Associate Dean, Budget and Development	**Arthur W. Herriott**
Associate Dean, Curriculum and Advisement	**Mary L. Volcansek**
Chairpersons:	
Biological Sciences	**Leon Cuervo**
Economics	**Mira Wilkins**
English	**Donald Watson**
History	**Howard Kaminsky**
Humanities	**Charles Elkins**
International Relations	**Ken Boodhoo**
Liberal Studies	**Martin Tracey**
Mathematical Sciences	**Samuel Shapiro**
Modern Languages	**Reinaldo Sanchez**
Performing Arts	**Philip Fink**
Philosophy and Religion	**James Huchingson**
Physical Sciences	**Howard Moore**
Political Science	**Judson DeCew**
Psychology	**Gary Moran**
Sociology and Anthropology	**Anthony Maingot**
Visual Arts	**Frank Wyroba**

Faculty

Aid, Francis, Ph.D. (*Georgetown University*), *Associate Professor, Modern Languages*

Algaze, Benjamin, Ph.D. (*University of South Florida*), *Assistant Professor, Psychology*

Antrim, Harry, Ph.D. (*University of Florida*), *Professor, English*

Arias, Ricardo, Ph.D. (*University of Paris*), *Professor, Philosophy and Religion*

Arnold, St. George Tucker, Jr., Ph.D. (*Stanford University*), *Associate Professor, English*

Baggett, Patricia, Ph.D. (*University of Colorado*), *Assistant Professor, Psychology*

Bekele, Gezahegne, M.A. (*Indiana University*), *Assistant Professor, Economics*

Berk, Lynn, Ph.D. (*Purdue University*), *Associate Professor, English*

(Continued)

Faculty

Blum, Milton, Ph.D. (*New York University*), *Professor, Psychology*

Boodhoo, Ken, Ph.D. (*University of the West Indies, Jamaica*), *Chairperson and Associate Professor, International Relations*

Bouma, Frederick J., Ph.D. (*University of Illinois*), *Associate Professor, Modern Languages*

Brain, Carlos, Ph.D. (*West Virginia University*), *Assistant Professor, Mathematical Sciences*

Breslin, Thomas, Ph.D. (*University of Virginia*), *Assistant Professor, International Relations*

Brown, Jerry, Ph.D. (*Cornell University*), *Associate Professor, Sociology and Anthropology*

Brownston, Lee, Ph.D. (*University of Minnesota*), *Assistant Professor, Psychology*

Buckley, Ralph, M.F.A. (*Maryland Institute*), *Assistant Professor, Visual Arts*

Burke, William, M.F.A. (*State University of New York at New Platz*), *Associate Professor, Visual Arts*

Chen, Chun-Fan, Ph.D. (*University of Michigan*), *Associate Professor, Biological Sciences*

Clem, Ralph, Ph.D. (*Columbia University*), *Associate Professor, International Relations*

Comfort, John C., Ph.D. (*Case Western Reserve University*), *Associate Professor, Mathematical Sciences*

Couper, James, M.A. (*Florida State University*), *Associate Professor, Visual Arts*

Crosby, James, Ph.D. (*Yale University*), *Professor, Modern Languages*

Cuervo, Leon, Ph.D. (*University of Maryland*), *Chairperson and Associate Professor, Biological Sciences*

DeCew, Judson, Ph.D. (*University of Connecticut*), *Chairperson and Assistant Professor, Political Science*

Draper, Grenville, Ph.D. (*University of the West Indies*), *Assistant Professor, Physical Sciences*

Duncan, Richard, M.F.A. (*Southern Illinois University*), *Assistant Professor, Visual Arts*

Dunn, Marvin, Ph.D. (*University of Tennessee*), *Associate Professor, Psychology and Associate Vice President for University Outreach and Services*

Dwyer, Richard, Ph.D. (*University of California at Los Angeles*), *Professor, English*

Edwards, Judith, M.A. (*City College of New York*), *Assistant Professor, Performing Arts*

Elkins, Charles, Ph.D. (*Southern Illinois University*), *Associate Professor, English, and Director of Humanities*

Elkins, Mary Jane, Ph.D. (*Southern Illinois University*), *Assistant Professor, English*

Escovar, Luis, Ph.D. (*Pennsylvania State University*), *Assistant Professor, Psychology*

Fink, Philip, Ph.D. (*University of Miami*), *Chairperson and Professor, Performing Arts*

Finley, Gordon, Ph.D. (*Harvard University*), *Professor, Psychology*

Berk, Toby, Ph.D. (*Purdue University*), *Associate Professor, Mathematical Sciences*

Blaney, Nancy, Ph.D. (*University of Texas*), *Assistant Professor, Psychology*

Fisher, Robert, Ph.D. (*University of Kansas*), *Vice President for Academic Affairs, and Professor, Mathematical Sciences*

Fjellman, Stephen, Ph.D. (*Stanford University*), *Associate Professor, Sociology and Anthropology*

Flanders, James, Ph.D. (*Vanderbilt University*), *Associate Professor, Psychology*

Flexser, Arthur, Ph.D. (*Stanford University*), *Assistant Professor, Psychology*

Foos, Paul, Ph.D. (*Bowling Green State University*), *Assistant Professor, Psychology*

Forbes, Barbara, Ph.D. (*University of California at Berkeley*), *Assistant Professor, Visual Arts*

Fox, Tillie, M.S. (*University of Miami*), *Instructor, Mathematical Sciences*

Ghai, Gauri, Ph.D. (*Iowa State University*), *Associate Professor, Mathematical Sciences*

Giberson, Philip, Jr., M.A. (*Memphis State University*), *Associate Professor, Performing Arts*

Girden, Edward, Ph.D. (*University of Illinois*), *Distinguished Professor, Psychology*

Goldberg, Walter, Ph.D. (*University of Miami*), *Associate Professor, Biological Sciences*

Gonzales de Mendoza, Ramon, Ph.D. (*Frei Universitat, Berlin*), *Professor, Modern Languages*

Gonzales-Reigosa, Fernando, Ph.D. (*Florida State University*), *Associate Professor, Psychology*

Gotterer, Malcolm, D.B.A. (*Harvard University*), *Professor Mathematical Sciences*

Gottlieb, Joel, Ph.D. (*University of California at Riverside*), *Associate Professor, Political Science*

Grabarek, Stanislaus, Ph.D. (*University of Chicago*), *Assistant Professor, Philosophy and Religion*

Guers-Villate, Yvonne, Ph.D. (*Bryn Mawr College*), *Professor, Modern Languages*

Hall, James, Ph.D. (*University of Utah*), *Associate Professor, English*

Hardy, Kenneth, Ph.D. (*Tulane University*), *Associate Professor, Physical Sciences*

Hauptli, Bruce, Ph.D. (*Washington University*), *Assistant Professor, Philosophy and Religion*

Henley, Carol, M.S. (*University of Miami*), *Instructor, Mathematical Sciences*

Henley, Kenneth, Ph.D. (*University of Virginia*), *Assistant Professor, Philosophy and Religion*

Herriott, Arthur, Ph.D. (*University of Florida*), *Associate Professor, Physical Sciences and Associate Dean, Arts and Sciences*

Hoch, Judith, Ph.D. (*McGill University*), *Assistant Professor, Sociology and Anthropology*

Howell, Ina Parks, M.S. (*Northwestern University*), *Instructor, Mathematical Sciences*

Huchingson, James, Ph.D. (*Emory University*), *Chairperson and Assistant Professor, Philosophy and Religion*

Jacobs, Ellen, M.S. (*Illinois Institute of Technology*), *Associate Professor, Visual Arts*

Jensen, John, Ph.D. (*Harvard University*), *Associate Professor, Modern Languages*

Jhabvala, Farrokh, Ph.D. (*Fletcher School of Law and Diplomacy*), *Assistant Professor, International Relations*

Johnson, Paulette, Ph.D. (*Kansas State University*), *Assistant Professor, Mathematical Sciences*

Jorge, Antonio, Ph.D. (*Villanova Universidad*), *Professor, International Relations*

Kaminsky, Howard, Ph.D. (*University of Chicago*), *Chairperson and Professor, History*

Kandel, Randy, Ph.D. (*City University of New York*), *Associate Professor, Sociology and Anthropology*

Karels, Gordon, Ph.D. (*Purdue University*), *Assistant Professor, Economics*

Kaufman, Arie, Ph.D. (*Ben Gurion University*), *Assistant Professor, Department of Mathematical Sciences*

Keller, Leonard, Ph.D. (*Yale University*), *Associate Professor, Physical Sciences*

Konkel, Richard, Ph.D. (*Bowling Green University*), *Associate Professor, Philosophy and Religion*

Kovacs, George, Ph.D. (*University of Louvain*), *Professor, Philosophy and Religion*

Kraynek, William, Ph.D. (*Carnegie-Mellon University*), *Associate Professor, Mathematical Sciences*

Kurtines, William, Ph.D. (*Johns Hopkins University*), *Associate Professor, Psychology*

Lardaro, Leonard, Ph.D. (*Indiana University*), *Assistant Professor, Economics*

Leed, Eric, Ph.D. (*University of Rochester*), *Associate Professor, History*

Leeds, Marie, M.A. (*University of Miami*), *Assistant Professor, Performing Arts*

LeRoy, Gene, M.S. (*Florida International University*), *Instructor, Modern Languages*

Levine, Barry, Ph.D. (*New School for Social Research*), *Associate Professor, Sociology and Anthropology*

Levitt, Mary, Ph.D. (*Syracuse University*), *Assistant Professor, Psychology*

Lilie, Joyce R., Ph.D. (*John Hopkins University*), *Associate Professor, Political Science*

Lowery, Shearon, Ph.D. (*Washington State University*), *Assistant Professor, Sociology and Anthropology*

MacDonald, Charles, Ph.D. (*University of Virginia*), *Assistant Professor, International Relations*

Maguire, William, M.S. (*Illinois Institute of Technology*), *Assistant Professor, Visual Arts*

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Maingot, Anthony, Ph.D. (*Florida State University*), *Chairperson and Professor, Sociology and Anthropology*

Makemson, John, Ph.D. (*Washington State University*), *Assistant Professor, Biological Sciences*

Martinez, Zaida, M.S. (*Pennsylvania State University*), *Instructor, Physical Sciences*

Mau, James A., Ph.D. (*University of California at Los Angeles*), *Professor, Sociology and Anthropology and Dean, Arts and Sciences*

Maurrasse, Florentin, Ph.D. (*Columbia University*), *Associate Professor, Physical Sciences*

Mazer, Paul, M.F.A. (*Pennsylvania State University*), *Assistant Professor, Performing Arts*

McElfresh, Clair, D.M.A. (*Case Western Reserve University*), *Professor, Performing Arts*

McIntosh, Terry, Ph.D. (*Michigan State University*), *Assistant Professor, International Relations*

McKenty, Geoffrey, Ph.D. (*University of Illinois-Urbana*), *Assistant Professor Mathematical Sciences*

Mintz, Stephan, Ph.D. (*Johns Hopkins University*), *Associate Professor, Physical Sciences*

Moncarz, Raul, Ph.D. (*Florida State University*), *Associate Professor, Economics*

Montiel, Pete, Ph.D. (*Massachusetts Institute of Technology*), *Assistant Professor, Economics*

Moore, Howard, Ph.D. (*University of Arkansas*), *Chairperson and Professor, Physical Sciences*

Moran, Gary, Ph.D. (*Katholieke University, Nijmegen, Netherlands*), *Chairperson and Professor, Psychology*

Murison, Gerald, Ph.D. (*John Hopkins University*), *Associate Professor, Biological Sciences*

Navlakha, Jai, Ph.D. (*Case Western Reserve University*), *Assistant Professor, Mathematical Sciences*

Nelson, Brian, Ph.D. (*University of California at Riverside*), *Associate Professor, Political Science*

Obata, Yoshihro, Ph.D. (*Michigan State University*), *Associate Professor, Performing Arts*

Okubo, Case, Ph.D. (*University of Guelph*), *Assistant Professor, Biological Sciences*

Osborne, William, Jr., Ph.D. (*Emory University*), *Associate Professor, Sociology and Anthropology*

Parker, Janat, Ph.D. (*University of California, Berkeley*), *Associate Professor, Psychology*

Parker, John, Ph.D. (*University of California, Berkeley*), *Associate Professor, Physical Sciences*

Peterson, Brian, Ph.D. (*University of Wisconsin*), *Associate Professor, History*

Peterson, Joyce, Ph.D. (*University of Wisconsin*), *Assistant Professor, History*

Pyron, Darden Asbury, Ph.D. (*University of Virginia*), *Assistant Professor, History*

Rock, Howard, Ph.D. (*New York University*), *Associate Professor, History*

Rohm, Joseph, Ph.D. (*Florida State University*), *Associate Professor, Performing Arts*

Romanelli, Ralph, Ph.D. (*University of Virginia*), *Assistant Professor, Mathematical Sciences*

Rosenberg, Mark, Ph.D. (*University of Pittsburgh*), *Assistant Professor, Political Science*

Rotton, James, Ph.D. (*Purdue University*), *Assistant Professor, Psychology*

Rubin, Richard, Ph.D. (*Washington University*), *Associate Professor, Mathematical Sciences*

Sanchez, Reinaldo, Ph.D. (*Washington University*), *Chairperson and Associate Professor, Modern Languages*

Saper, Bernard, Ph.D. (*University of California at Los Angeles*), *Professor, Psychology*

Sauleda, Orlando, M.S. (*Florida International University*), *Instructor, Mathematical Sciences*

Shapiro, Samuel S., Ph.D. (*Rutgers University*), *Chairperson and Professor, Mathematical Sciences*

Sheldon, John, Ph.D. (*Texas A&M University*), *Professor, Physical Sciences*

Shershin, Anthony, Ph.D. (*University of Florida*), *Associate Professor, Mathematical Sciences*

Skotko, Vincent, Ph.D. (*University of Cincinnati*), *Assistant Professor, Psychology*

Slifker, James, Ph.D. (*University of Notre Dame*), *Associate Professor, Mathematical Sciences*

Stack, John, Ph.D. (*University of Denver*), *Assistant Professor, Political Science*

Stein, Abraham, Ph.D. (*University of Southern California*), *Professor, Biological Sciences.*

Stinson, Michael C., M.S. (*Michigan State University*), *Instructor, Department of Mathematical Sciences*

Sugg, Richard, Ph.D. (*University of Florida*), *Associate Professor, English*

Svenson, Arthur, Ph.D. (*University of California at Santa Barbara*), *Assistant Professor, Political Science*

Szuchman, Mark, Ph.D. (*University of Texas*), *Assistant Professor, History*

Taylor, George, Ph.D. (*University of Massachusetts*), *Assistant Professor, Biological Sciences*

Thomas, Babatunde, Ph.D. (*Indiana University*), *Associate Professor, Economics*

Todd, Therald, Ph.D. (*University of Oregon*), *Associate Professor, Performing Arts and Director of Theater*

Tracey, Martin, Ph.D. (*Brown University*), *Associate Professor, Biological Sciences and Director of Liberal Studies*

Vagramian, Violet, Ph.D. (*University of Miami*), *Associate Professor, Performing Arts*

Vickers, William, Ph.D. (*University of Florida*), *Assistant Professor, Sociology and Anthropology*

Volcansek, Mary L., Ph.D. (*Texas Tech University*), *Associate Professor, Political Science and Associate Dean, Arts and Sciences*

Watson, Donald, Ph.D. (*University of Virginia*), *Chairperson and Associate Professor, English*

Watson-Espener, Maida, Ph.D. (*University of Florida*), *Assistant Professor, Modern Languages*

Waugh, Butler, Ph.D. (*Indiana University*), *Professor, English*

Welch, Marcelle, Ph.D. (*University of Michigan*), *Assistant Professor, Modern Languages*

Whitehurst, Thomas, Ph.D. (*Indiana University*), *Assistant Professor, Mathematical Sciences*

Whidden, Matrid H., M.S. (*Florida Technological University*), *Instructor, Department of Mathematical Sciences*

Wilkins, Mira, Ph.D. (*Cambridge University*), *Chairperson and Professor, Economics*

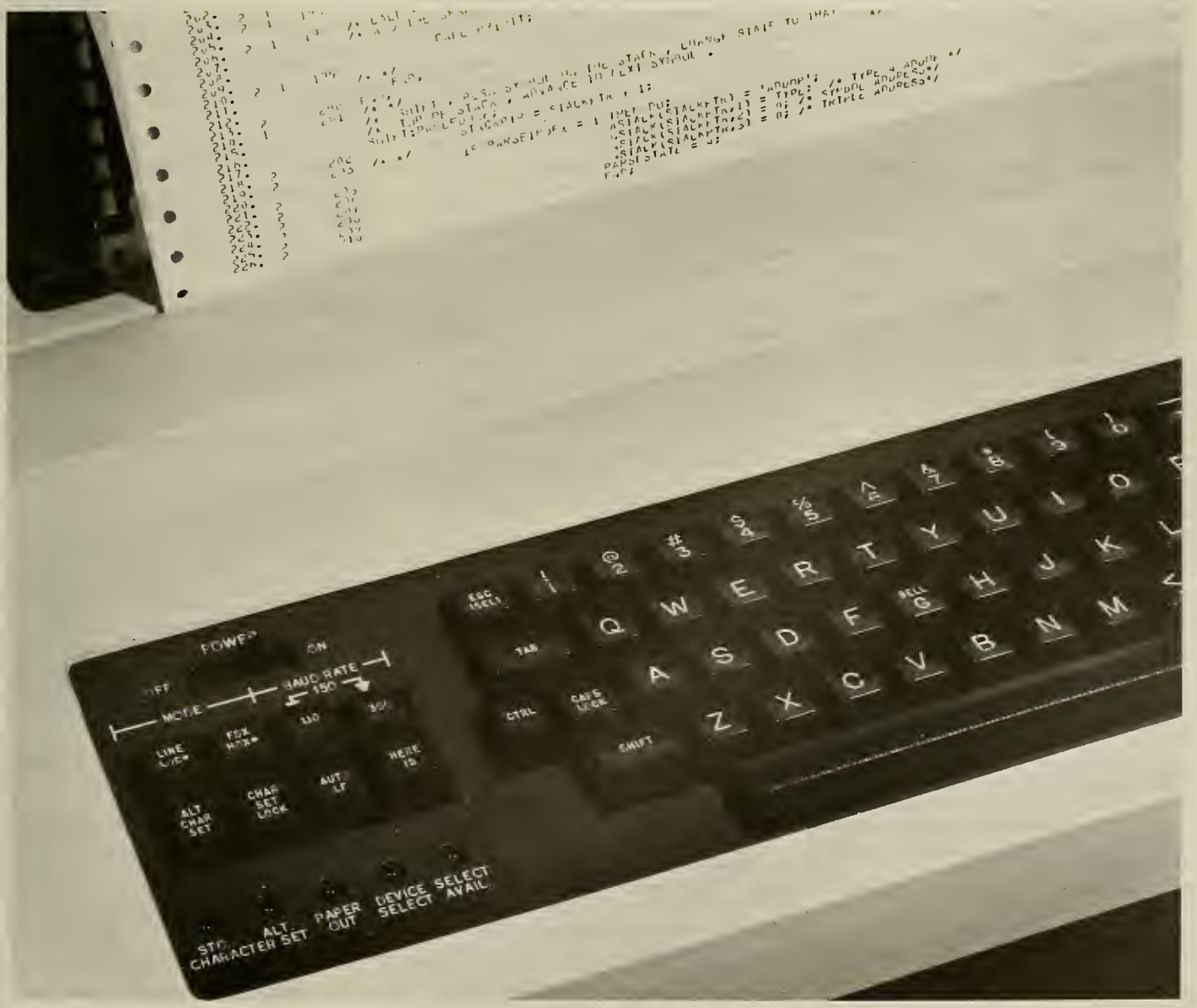
Williams, Kathryn, Ph.D. (*Florida State University*), *Associate Professor, Physical Sciences*

Williams, Willie, Ph.D. (*Michigan State University*), *Associate Professor, Mathematical Sciences*

Wyroba, Francis, M.A. (*Columbia University*), *Chairperson and Professor, Visual Arts*

Yudin, Florence, Ph.D. (*University of Illinois*), *Professor, Modern Languages*

School of Business and Organizational Sciences



General Information

The School of Business and Organizational Sciences offers academic programs leading to the undergraduate degree of *Bachelor of Business Administration* and the graduate degree of *Master of Business Administration, Master of International Business,* and *Master of Science in Management.* These programs are designed to help prepare the student for careers in business, public administration, and other areas of management.

Programs of the School of Business and Organizational Sciences are based on a background of courses in the arts and sciences, followed by a foundation in management policies, institutions, and operations, including study of the basic managment tools: analysis and decision-making. Further study in the functional areas of enterprise leads to a thorough preparation in a selected field of specialization.

The School is organized into the departments of: Accounting; Finance and International Business; Management; and Marketing. At the Tamiami Campus there is a central undergraduate advising unit (DM361) and a graduate coordinator (DM362B). These advisors are available to provide detailed information about programs offered by the School. Their telephone number is (305) 552-2781. For students at the North Miami Campus, there are undergraduate and graduate counselors. Their telephone number is (305) 940-5870.

Programs of Study

Every student must have a program of study completed by the end of his or her first quarter of attendance. A completed program of study is one that has been filled out and signed by the student, his or her counselor and the appropriate Department Chairperson. If such a program of study is not completed at least three (3) quarters before a student is expected to graduate, the student may not be permitted to register for further classes. Entering students should immediately call (305) 552-2781 Tamiami Campus, or (305) 940-5870 at the North Miami Campus for a counseling appointment. Please note that no more than 20 quarter hours of credit (undergraduate students), or 15 quarter hours of credit (graduate students) may be taken as a special student and applied toward a degree. Courses must be approved in advance by a counselor.

Counseling

As noted above, the School has a centralized undergraduate counseling unit with three counselors (DM361) and a graduate coordinator (DM362B) at the Tamiami Campus; and undergraduate and graduate counselors at the North Miami Campus.

Undergraduate Study: General Information

A student entering into a bachelor's program of the School is required to have completed the *Associate of Arts* degree or its equivalent, and is encouraged to bring with him or her some knowledge of accounting, mathematics, computer programming, and economics. The broad liberal arts exposure inherent in the *Associate of Arts* degree usually enables a student to complete the *Bachelor of Business Administration* requirements in the equivalent of two years, and to take most of the professional work with Florida International's School of Business and Organizational Sciences. This professional work includes: (1) certain required courses, each of which is designed to introduce the student to a common body of knowledge, including quantitative analysis, finance and control, administrative theory and practices, the social and legal environment of business and government, and marketing and distribution; (2) courses required for the student's major; (3) *approved* elective courses; and, (4) pre-core courses (where necessary).

The student entering an undergraduate program of the School of Business and Organizational Sciences is required to meet the following four standards:

1) 90 quarter hours (60 semester) completed.
2) grade point average of 2.0 or above.
3) satisfaction of general University requirements for admission, including, in this case, the general education requirements. The general education requirements are: English composition (9), humanities (9), social science (9), natural science (9), mathematics (4), electives in one or more of the above areas (14).

NOTE: If a student has above a 2.0 GPA, he/she may be deficient in 4.5 quarter hours of general education credits and still be accepted into this program.

The basic program in the School of Business and Organizational Sciences to obtain a *BBA* degree is 90 quarter hours. Generally, the student completing general education requirements, or making up prerequisite deficiencies at Florida International will add these credits to his or her basic 90 quarter hour program. At a minimum, the student's last 45 hours of courses must be taken at Florida International. All lower division deficiences must be completed during the student's first two quarters at Florida International.

Upper Division Transfer Credits

Previous credit may be considered acceptable for transfer toward upper level academic study in the School if the credit was earned within the last six (6) years, and was designated as junior-senior level credit at an accredited four year or upper level institution, or can be validated by some acceptable measure to verify its equivalence. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

Change of Major

Any student attempting to change to a new or revised major in the School of Business and Organizational Sciences must meet the requirements that exist at the time of the change.

Residency Requirements

A student must complete his or her last 45 quarter hours of course work at Florida International to qualify for the *BBA* degree from the School.

Credit-By-Examination

A student registered for a course in the School may, at the discretion of the instructor and department chairperson, and after presenting sufficient justification, attempt credit by examination. The special examination will be given by the course instructor, preferably during the first week of classes to allow registration for another course that academic quarter. A grade of EM will be noted on the course grade roll at the end of the quarter if the student, in the opinion of the professor, has passed the special examination.

Course Selection and Class Loads

Generally, a junior level student should concentrate on the 45 quarter hours of core courses (and pre-core courses, if needed). Courses at the 4000 and 5000 levels are normally taken during the senior year, and the student must have the necessary background and/or training before enrolling.

(Continued)

Business

The normal class load each quarter for an undergraduate student is:

	*Quarter Hours**
Full-time attendance	15
Working part-time	10
Working full-time	5

*Unusual circumstances combined with high scholarship may warrant an exception –which must be approved by the Dean.

Graduation Procedures

1. During the first year in the program, undergraduate and graduate students develop and sign, with their faculty advisor and Dean, advance standing forms and programs of study. This program of study becomes the basic contract between the School and the student, and is used in determining when a student is eligible for a degree. The Dean's Office should receive copies of all programs of study after all signatures have been obtained.
2. Approximately five months prior to the expected graduation date, the student files an application for graduation with the Office of Registration and Records.
3. The Dean's Office, having received this application from the Office of Registration and Records, has the appropriate faculty advisor review the student's record in order to determine that he has fulfilled, or is in the process of fulfilling, the courses required for graduation as listed in his program of study.
4. If the student's progress is deemed acceptable, the faculty advisor, Department Chairperson, and Dean certify the application for graduation, contingent upon completion of the course work which the student is registered for in his final quarter.

Undergraduate Majors

Major programs leading to the bachelor's degree are offered in Accounting, Finance, Insurance, International Business, Management, (including Personnel Management and Information Systems), Marketing, Real Estate, and Transportation Management.

Undergraduate Business Program Requirements

LOWER DIVISION PREPARATION:

The following courses in addition to the other requirements for the *Associate of Arts* degree, should be a part of the 90 quarter hours (60 semester hours) of lower division coursework completed in order to enter these upper division majors: 6 semester hours of accounting; 6 semester hours of economics; 3 semester hours of college algebra; 3 semester hours of statistics; 3 semester hours of computer programming. If completed at Florida International University, this courswork will normally be taken *in addition* to the 90 quarter hours of required upper division work.

Computer Programming Proficiency Requirement: The rapidly increasing need of the professional administrator for exposure to computer technology and terminology is the rationale for the computer programming proficiency requirement of the School. The growth and reliance on data processing techniques by business and government demand that fundamental experience in this area be achieved. Therefore, prior to enrollment in CIS 3000 (or ACC 4731), each student must demonstrate computer programming proficiency. This requirement may be completed in *any* of the following ways:

– Successful completion of a computer programming course at the lower division.
– Successful completion of COP 3172–Basic Programming for Business.
– Self-study, or work experience. An examination is offered on a regular basis for students selecting this alternative.

Further details may be obtained from the Advisement Office of the School.

UPPER DIVISION PROGRAM:

		Quarter Hours
Pre-Core Courses Required for Business Administration Students:		
*ACC 3300	Accounting for Decisions	5
*ECO 3003	Economics, Man & Society	5
*STA 3132	Quantitative Methods for Administation	5
COP 3172	Basic Programming for Business	5
		20

**NOTE:* STA 3132, ECO 3003 and ACC 3300 will be waived if the student received an A, B, or C in the appropriate lower division courses. Please see a counselor to determine whether these courses should or should not be added to your academic program. If a student has successfully completed comparable courses at the lower level, upper divison credit will not be given for STA 3132, ECO 3003 and ACC 3300.

Core Courses Required for Business Administration Students:		
FIN 3403	Financial Management	5
MAN 3503	Managerial Decision Making	5
MAR 3023	Marketing Management	5
QMB 3150	Applications of Quantitative Methods in Business	5
**CIS 3000	Introduction to Information Systems	5
**ACC 3303	Accounting for Planning and Control	5
MAN 3010	Organization and Management	5
MAN 3712	Business and Society	
or		
MAN 3602	International Business	5
ECO 3432	Applied Macroeconomics	5
MAN 4630	International Business Policy (international business majors)	
or		
MAN 4722	Policy Analysis	5
		50

**These courses should *not* be taken by students majoring in accounting. See page 00 for accounting core courses and programs.

Major: Required Courses	**25**
Approved Electives	**15**
TOTAL (does not include deficiencies)	**90**

NOTE: All electives must be approved in advance by the Department Chairperson.

Prerequisites for Business Core Courses

ACC 3300 ACCOUNTING FOR DECISIONS –This course will be waived if student received a "C" grade or better in a Principles of Accounting sequence (This would be ACC 1001, & 1021, or ACC 1009, 1029, 1021 at Miami-Dade).

ECO 3003 ECONOMICS, MAN AND SOCIETY–This course will be waived if student received a "C" grade or better in Principles of Economics sequence (ECO 2013 & ECO 2023 at Miami-Dade).

STA 3132 QUANTITATIVE METHODS FOR ADMINISTRATION I–This course will be waived if student received a "C" grade or

(Continued)

Accounting

better in a comparable level statistics course (STA 2014 at Miami-Dade).

FIN 3403 FINANCIAL MANAGEMENT–ACC 3300 or its equivalent (see above for ACC 3300).

MAN 3503 MANAGERIAL DECISION MAKING–College algebra, statistics, and QMB 3150 or its equivalent.

MAR 3023 MARKETING MANAGEMENT –None.

QMB 3150 APPLICATION OF QUANTITATIVE METHODS IN BUSINESS–STA 3132, or its equivalent (see above for STA 3132) and college algebra.

CIS 3000 INTRODUCTION TO INFORMATION SYSTEMS computer programming proficiency requirement (COC 1300 at Miami-Dade, COP 3172 at FIU).

ACC 3303 ACCOUNTING FOR PLANNING AND CONTROL–ACC 3300 or its equivalent (see above for ACC 3300).

MAN 3010 ORGANIZATION AND MANAGEMENT–None.

MAN 3712 BUSINESS AND SOCIETY–ECO 3003 or its equivalent (see above for ECO 3003).

MAN 3602 INTERNATIONAL BUSINESS–ECO 3432.

ECO 3432 APPLIED MACROECONOMICS –ECO 3003 or its equivalent (see above for ECO 3003).

MAN 4630 INTERNATIONAL BUSINESS POLICY–Open only to international business majors in lieu of MAN 4722. Course should be taken in student's last academic quarter before graduation.

MAN 4722 BUSINESS POLICY–Completion of all core course requirements. Course should be taken in student's last academic quarter before graduation.

Professional Accounting Majors

Irving L. Fantl, *Professor and Chairperson*
Jack L. Carter, *Assistant Professor*
Lucia S. Chang, *Associate Professor*
Alf L. Erickson, *Assistant Professor*
Donald W. Fair, *Instructor and Assistant Dean*
Rosalie C. Hallbauer, *Associate Professor*
Harvey S. Hendrickson, *Professor*
David Lavin, *Associate Professor and Associate Dean*
Ronald J. Lewis, *Professor*
Myron S. Lubell, *Associate Professor*
Kenneth S. Most, *Professor*
Leandro S. Nunez, *Instructor*
Edward P. Phillips, *Assistant Professor*
Leonardo Rodriguez, *Associate Professor*
Lois Slutsky, *Instructor*
Doria Yeaman, *Lecturer*

The bachelor's degree program in accounting consists of three parts: the core (40 quarter hours), concentration in accounting (35 quarter-hours), and electives (15 quarter-hours), which must be selected from among the courses listed below or be approved by the Chairperson of the Accounting Department.

Courses for an emphasis in Managerial Accounting are:

Required Courses: ACC 4102, ACC 4122, ACC 4201, ACC 4301, ACC 4501, ACC 4731, ACC 4348

Elective Courses: ACC 4601, ACC 4648, ACC 4548, ACC 4522, MAN 4722, ACC 3949,ACC 4949, ECO 3101, ECO 4623, ECO 4134, ENC 3453, ENC 3353, (FIN 4000 Level Elective), BUL 4100, BUL 4661, MAN 5830, MAN 5831, MAN 5832, COP 3120, QMB 4680, MAN 4820, MAN 4523.

Courses for an emphasis in Financial and Public Accounting are:

Required Courses: ACC 4102, ACC 4122, ACC 4201, ACC 4301, ACC 4501, ACC 4601, ACC 4731.

Elective Courses: ACC 4648, ACC 4548, ACC 4522, ACC 4803, ACC 4271, ACC 4248, ACC 4348, MAN 4722, ACC 5111, ACC 5865, ACC 5211, ACC 3949, ACC 4949, ECO 3101, ECO 4623, ECO 4134, ENG 3453, ENG 3353, FIN (4000 Level Elective), BUL 4661, COP 3120.

Florida CPA Requirement

Completion of a *Bachelor of Business Administration* with emphasis in accounting is accepted by the Florida State Board of Accountancy as fulfilling requirements to sit for the Certified Public Accounting Examination.

The law relating to the practice of public accounting (Chapter 473, Florida Statues 1969) provides in Rule 21A-9.02–Major in Accounting that:

> For purposes of Section 473.08(4)(b), F.S., a major in accounting is defined as an educational program at accredited colleges or universities which includes at least 18 semester hours or 27 quarter hours, or the equivalent, in accounting education above the elementary level and 27 semester hours or 40 quarter hours, or the equivalent, in general business education. For this purpose, accounting hours above the minimum requirement may be substituted for general business hours.

Academic Standards–Accounting

The upper-division undergraduate accounting program is designed to introduce the student to that common body of knowledge of business and accounting needed for the development and growth of the professional accountant in public accounting, industry, education, and government. The student is urged to acquire a broad, general education in the arts, the humanities and the sciences at the lower-divison level for his or her own personal development and growth.

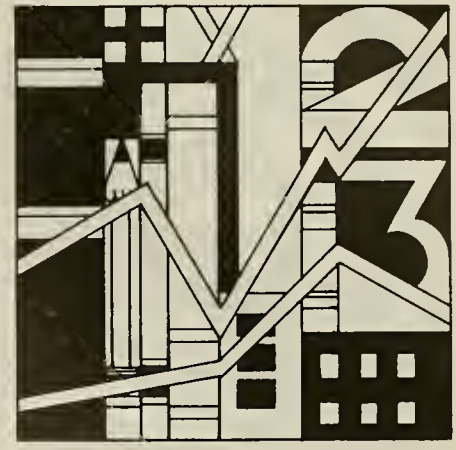
Accounting is a profession with high entrance and retention standards. Since this program is designed to help prepare students for careers in the accounting profession, its grading, retention, and graduation standards also must be high. The student who earns a "D" or less in one or more of the first three courses taken (ACC 4102, ACC 4122, and ACC 4301) may not continue taking courses in the accounting program without written permission of the Chairperson of the Accounting Department. In addition, to qualify for the *Bachelor of Business Administration* degree with a major in accounting, the student must have a "C" average or better in all accounting courses attempted.

Model Schedule–Public Accounting Major

The following is a model schedule (with several options) that must be followed by the typical full-time student who (1) has completed all of the freshman-sophomore requirements, and (2) wishes to complete the undergraduate accounting program with emphasis in public accounting. Deviations from this schedule must be approved by the Chairperson of the Accounting Department. (The student possessing a non-business baccalaureate degree should consult a School of Business and Organizational Sciences academic counselor for alternative programs that meet the Florida State Board of Accountancy requirements).

(Continued)

Finance, Insurance, International Business



Quarter 1
FIN 3403
QMB 3150
MAN 3712

Elective: ECO 3101, ECO 4623, ECO 4134, ENC 3353, a 4000 level finance course or BUL 4661, COP 3120

Note: Pre-core deficiencies must be completed in Quarter 1.

Quarter 2
ACC 4102
MAN 3503
ECO3432

Quarter 5
ACC 4601
ACC 4201

Quarter 3
ACC 4122
MAR 3023
MAN 3010

Elective: ACC 4648, ACC 4548, ACC 4522, ACC 4248, ACC 4348, a 4000 level finance course, COP 3120

Quarter 6
MAN 4722
ACC 4731

Quarter 4
ACC 4301
ACC 4501

Elective: BUL 4661, ACC 4648, ACC 4548, ACC 4522, ACC 4248, or ACC 4348

Finance Major

Duane Kujawa, *Professor and Chairperson*
Francis Deastlov, *Assistant Professor*
Constantine Kalogeras, *Associate Professor*
Arun Prakash, *Assistant Professor*
Emmanuel Roussakis, *Associate Professor*
William Welch, *Associate Professor*

LOCATION: Tamiami and North Miami Campuses

DEGREE: *Bachelor of Business Administration*

The Finance program leading to the BBA degree is designed to give the undergraduate student managerial finance skills in the functional areas of banking, corporate finance, investments, and international finance. The program consists of (1) 50 quarter hours of general business core courses, (2) 10 quarter hours of finance core courses (FIN 4404 and FIN 4303), (3) a *minimum* of 15 quarter hours of finance specialization courses selected from the above mentioned functional areas, and (4) 15 quarter hours of elective courses. Students are urged to select economics, real estate, insurance, accounting, or additional finance courses as electives. The prerequisite for 4000 and 5000 level finance courses is FIN 3403.

Finance Program core Courses:		*Quarter Hours*
FIN 4303	Financial Markets and Institutions	5
FIN 4404	Policies for Financial Management	5
Functional Areas of Specialization		
Banking:		
FIN 4313	Financial History of the United States	5
FIN 4324	Commercial Bank Management	5
BAN 5651	Savings and Loans I	5
Investments:		
FIN 4502	Securities Analysis	5
FIN 4504	Portfolio Analysis and Management	5
FIN 5515	Futures Trading	5
Corporate Finance:		
FIN 4419	Capital Budgeting Techniques and Applications	5
FIN 5314	Working Capital Management	5
FIN 5444	Leasing and Mergers	5
FIN 5473	Small Business Finance	5
International Finance:		
FIN 4611	International Financial Management	5

See advisor for additional specialization requirements

Insurance Major

An insurance major is offered through the Department of Finance and International Business. An insurance major is required to take 25 quarter hours of insurance courses at the 4000 level. For most students majoring in insurance the following five courses are recommended:

RMI 4015	Principles of Insurance
RMI 4212	Property Insurance I
RMI 4213	Property Insurance II
RMI 4220	Casualty Insurance I
RMI 4221	Casualty Insurance II

These five insurance courses have been approved by the State of Florida Insurance Commissioner's office to fulfill the educational requirements for taking the 2-20 license examination.

A student may, however, after consultation with his or her major advisor, choose to take other courses such as RMI 4115—Life Insurance, RMI 4016—Management of Insurance Enterprise, or other insurance offerings. Students may also be eligible for the Certificate of Professional Insurance Accomplishment (for which see page 000).

International Business Major

Duane Kujawa, *Professor and Program Coordinator*
Francis Deastlov, *Assistant Professor*
Irving Fantl, *Professor*
Robert Grosse, *Assistant Professor*
Richard Hodgetts, *Professor*
David Lavin, *Associate Professor and Associate Dean*
N. Paul Loomba, *Professor and Dean*
Jan B. Luytjes, *Professor*
Kenneth S. Most, *Professor*
Leonardo Rodriguez, *Associate Professor*
Emmanuel Roussakis, *Associate Professor*
F. Bruce Seaton, *Associate Professor*
George B. Simmons, *Distinguished University Professor*
George Sutija, *Associate Professor*
Ronald H. Vogel, *Associate Professor*

(For Non-Accounting Majors)

An International Business (IB) major is offered through the Department of Finance and International Business. The IB major must take MAN 3602—International Business in the business core. All IB majors are required to declare a functional major (such as Finance, Management, or Marketing), and to satisfy the requirements of that major. In so doing, however, the international course in the functional major must be taken (such as FIN 4611—International Financial Management or MAR 4243—International Marketing). In addition, the elective courses (three minimum) provided for in the functional majors must be selected from the following (exclusive of the international course in the declared functional major), with the concurrence of the International Business program coordinator.

ACC 4271	International Accounting
FIN 4611	International Financial Management
MAN 4600	International Management

(Continued)

Management

ECS 3003	Comparative Economic Systems
ECO 4701	World Economy
ECO 4733	Multinational Corporation

(See advisor for additional electives)

The capstone course, MAN 4630–International Business Policy, is required of all IB majors in lieu of MAN 4722–Policy Analysis. It should be taken in the final quarter prior to graduation. The IB major is offered only as a second major, but ordinarily would not involve additional course work beyond that required in the single major programs. Accordingly, students selecting the IB option will graduate as dual majors in the functional field of their choice and International Business.

(For Accounting Majors)

The Accounting–International Business dual major is essentially that described above, but with slight modification. International Business and MAN 4630–International Business Policy, are required. In addition to the seven senior level courses required of Accounting majors, the Accounting–IB dual major *must* take ACC 4271–International Accounting as an elective. He must also select two electives from the list of electives noted above. FIN 4611–International Financial Management is highly recommended as one of these. The dual major is designed so that a student may normally complete it within the total 90 credit hour degree requirement of the University.

Management Major

Enzo R. Valenzi, *Associate Professor and Chairperson*
Steve Altman, *Associate Professor and Associate Vice President, Academic Affairs*
Elias M. Awad, *Professor*
Israel Brosh, *Visiting Associate Professor*
Wayne F. Cascio, *Associate Professor*
Gary Dessler, *Professor*
Herman W. Dorsett, *Associate Professor*
Dana Farrow, *Assistant Professor*
Ernest Friday, *Assistant Professor*
Edward L. Hannan, *Associate Professor*
Richard M. Hodgetts, *Professor and Chairperson, Marketing & Environment*
Robert H. Hogner, *Associate Professor*
William T. Jerome, *Distinguished University Professor*
N. Paul Loomba, *Professor and Dean*
Jan B. Luytjes, *Professor*
Karl O. Magnusen, *Associate Professor and Associate Dean*
Joan Mills, *Assistant Professor*
Frederick F. Newpeck, *Associate Professor*
J. A. F. Nicholls, *Associate Professor*
Alan J. Parker, *Associate Professor*
Daniel J. Robey, *Associate Professor*
Leonardo Rodriguez, *Associate Professor*
Gloria Shapiro, *Assistant Professor*
Larry Smith, *Associate Professor*
William M. Taggart, *Associate Professor*
Efraim Turban, *Professor*

LOCATION: Tamiami and North Miami Campus

DEGREE: *Bachelor of Business Administration*

The Department of Management offers degree programs of study at the bachelor's level in Organizational Theory, Personnel Management, Behavioral Science, Management Science, and Information Systems. The student is given wide latitude either to specialize in one particular area, or to select from courses on a more general level of professional education. The Management major requires 20 quarter hours of courses listed with the Management Department at the 4000 or 5000 level. MAN 4521 (Operations Planning and Control) is required for all students within the 20 hours requirement with the exception of those selecting the Personnel Management track.

Alternative suggestions for course selections in various tracks follow the suggested general program of study below.

Quarter 1	*Quarter 4*
QMB 3150	ECO 3432
ACC 3303	One course in the Management Department
MAN 3010	One elective course*
Quarter 2	*Quarter 5*
FIN 3403	Two courses in the Management Department
MAN 3503	One elective*
MAR 3023	
Quarter 3	*Quarter 6*
CIS 3000	MAN 4722
MAN 3712	Two electives*
MAN 4521	

*Elective courses outside SBOS should be taken in the Departments of Economics, Mathematical Sciences, or Psychology. Exceptions may be permitted with the approval of the Department Chairperson.

Alternative courses for Management students in specific subject areas:

1. *Personnel Management (Select 4 of 5)*
   MAN 4401 Industrial Relations
   MAN 4410 Labor, Managment, and Collective Bargaining
   MAN 4301 Personnel Management
   MAN 4320 Personnel Recruitment and Selection
   MAN 4330 Wage and Salary Administration.
2. *Information Systems.*
   MAN 4820 Systems Anaysis and Design
   MAN 4821 Information Systems Development
   MAN 4822 Systems Management
   MAN 4521 Operations Planning and Control.
3. *Management: Option A.*
   MAN 4521 Operations Planning and Control
   MAN 4201 Organization Theory
   MAN 4151 Behavioral Sciences in Management
   MAN 4120 Intergroup Relations in Organizations.
4. *Management: Option B.*
   MAN 4521 Operations Planning and Control
   MAN 4600 International Management
   MAN 4201 Organization Theory
   MAN 4802 Small Business Management.
5. *Management: Option C.*
   MAN 4521 Operations Planning and Control
   Any three (3) other courses listed with the Management Department.

(Continued)

Marketing, Real Estate, Transportation Management

Marketing Major

Richard M. Hodgetts, *Professor and Chairperson*
Anne Fiedler, *Instructor*
Lynda Raheem, *Instructor*
Sydney Roslow, *Associate Professor*
Willard M. Salzer, *Associate Professor*
F. Bruce Seaton, *Associate Professor*
Robert J. Thomas, *Assistant Professor*
Ronald H. Vogel, *Associate Professor*

The bachelor's degree program in marketing necessitates 25 quarter hours of marketing courses at the senior (4000) level. Of these quarter hours, 15 hours consist of the following required courses:

MAR 4503	Consumer Behavior
MAR 4613	Marketing Research
MAR 4713	Cases in Marketing Management

The remaining 10 credit hours may be selected by the student with his or her advisor from other marketing course offerings. It is suggested that students concentrate in a specific area and take, for example:

1. *Advertising Concentration*
   MAR 4303 Advertising Management
   MAR 4344 Advertising Campaign Management
2. *Retailing Concentration*
   MAR 4153 Retailing Management
   MAR 4154 Cases in Retailing Management
3. *International Concentration*
   MAR 4243 International Marketing
   MAR 4244 Export Marketing
4. *Distribution Concentration*
   MAR 4203 Marketing Channels
   MAR 4213 Transportation Logistics

Marketing majors, however, are not limited to the above concentrations and may choose courses from any other marketing offerings or any mix of courses.

Real Estate Major

William R. Beaton, *Professor*
Vance R. Johnson, *Assistant Professor*

A real estate major at the bachelor's degree level is offered through the Department of Finance and International Business within the School of Business and Organizational Sciences. The real estate major is expected to take 25 quarter hours within the real estate course offerings or, with the consent of his or her advisor, in an allied field. Under normal circumstances a real estate major without previous formal undergraduate work in the area will be expected to take the two introductory courses (REE 4040—Introduction to Real Estate, and REE 4430—Legal Environment of Real Estate), as well as three other 5 quarter hour courses chosen with the consent of his or her major advisor.

Transportation Management Major

A bachelor's degree program with a major in Transportation Management is offered through the Department of Marketing. The student who wishes to major in Transportation Management is required to take 25 quarter hours of transportation management courses at the senior (4000) level. The student is required to take TRA 4240—Transportation Systems and Services for 5 quarter hours of major field credit. Besides this course, the student is encouraged to take other courses in transportation management (such as TRA 4012 Transportation Logistics; TRA 4101—Transportation Rate Making; TRA 4203—Physical Distribution Management; and TRA 4510—Mass Transportation and Urban Problems), or three courses in a field such as air transportation (as TRA 4410—Air Transportation; TRA 4411—Airport Management; and TRA 4412—Air Carrier Management).

Graduate Study: General Information

The Graduate Programs of the School of Business and Organizational Sciences offer the student advanced professional education for managerial careers in business and government. At the graduate level, the degrees of *Master of Business Administration, Master of International Business,* and *Master of Science in Management,* in Accounting, Finance, or Real Estate are offered.

Generally, graduate programs in the School of Business and Organizational Sciences are aimed at accomplishing two objectives. The first objective is to provide the student with a sound foundation in a variety of management functions, such as marketing, production, accounting, finance, quantitative methods, decision-making, and behavioral science. Based upon this foundation, the second objective of the programs in the School is to provide students with a specialization and expertise in a particular area of management, so as to facilitate the student's performance on his or her entry or second level job.

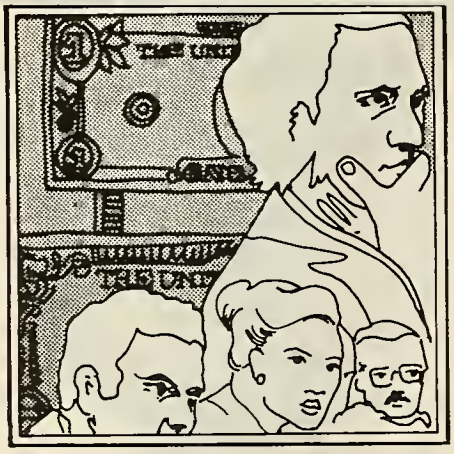
Admission Requirements

To be eligible for admission to the graduate programs in the School of Business and Organizational Sciences at Florida International, the applicant must:

1. Satisfactorily meet the general University requirements for admission to graduate programs.
2. Hold a bachelor's degree from a regionally accredited college or university.
3. Meet the minimum standards regarding entrance examination scores and upper-division grades as determined by the faculty:
   a) Admission to the *Master of Business Administration (MBA)* and the *Master of Science in Management-Accounting, Finance,* and *Real Estate* programs will be based upon a combination of the score on the *Graduate Management Admissions Test (GMAT)* and the upper division grade-point average (GPA). Specifically, the applicant must have a combined score of at least 1000 points, computed as follows:
   (GPA X 200) + (GMAT score) = 1000, with a minimum 450 on the GMAT.
   b) Admission to the *Master of International Business* program will be based upon either an upper division grade point average of 3.0 or higher or a score of 450 or better on the *Graduate Management Admissions Test (GMAT).* Every applicant is required to take the GMAT test.
4. Present, if a foreign student, a minimum score of 500 on the TOEFL, or equivalent on a comparable examination. (See General Admission Requirements for Foreign Students (undergraduates and graduates) in the Admission section of the catalog).
5. Be in good standing with previous colleges or universities attended.

(Continued)

Graduate Study



Application Procedures for the Master of Business Administration, Master of International Business, and Master of Science in Management Programs

A student planning to enroll in graduate studies in the School must complete the following steps and meet the stipulated requirements:

1. Submit a graduate application for admission to the Admissions Office of Florida International. Application forms will be mailed upon request. The admission process may require as much as two months after receipt of the application, depending upon the time involved in the receipt of transcripts and test scores.
2. Have a copy of the official transcripts of all previously earned college or university credits sent from the applicant's former institution(s) to the Admissions Office of Florida International. (Copies submitted directly by applicants are *not* accepted for application purposes).
3. All candidates applying to the MBA, MIB, or MSM Accounting, Finance, and Real Estate programs must submit his or her scores on the *Graduote Management Admissions Test (GMAT)*, administered nationally by the Educational Testing Service (Box 966, Princeton, New Jersey 08540). Registration forms will be mailed upon request.

Degree Requirements

To be eligible for a Master's degree, a student must:

1. Satisfy all University requirements for a master's degree.
2. Meet the requirements of an approved Program of Study.*
3. (a) Complete a minimum of 45 quarter hours (depending on program) of graduate level coursework, for the *Master of Science in Management* programs.
   (b) Complete a minimum 60 quarter hours of graduate level coursework, for the *Master of Business Administration* or *Master of International Business.*
4. Earn a minimum average of "B" (3.0) or the equivalent in all work completed at FIU as a graduate student.

*The student's Program of Study is developed by the student and his faculty advisor and must be approved by the Department Chairperson and the Dean of the School of Business and Organizational Sciences.

Graduation Procedures

See the procedures in the General Information section of the University catalog.

Grades and Credits

No courses in which a grade below "C" is earned may be counted toward the MBA, MIB, or MSM degrees. However, all work taken as a graduate student will be counted in computing the grade point average, including courses graded "D" or "F", and any undergraduate courses taken while a graduate student.

Transfer Credit

The student may receive permission to transfer up to a maximum of 10 quarter hours of graduate credit to his or her degree program, provided that: (1) the course(s) were taken at the graduate level at an accredited college or university; (2) the course(s) were not introductory or "survey" in nature; (3) grade(s) of "B" or better were earned; (4) the course(s) are judged by the faculty advisor, Department Chairperson, and Dean to be relevant to the student's graduate program; and (5) the credit(s) were not used toward another degree. Credit is not transferable until the student has earned 25 quarter hours in his School of Business and Organizational Sciences graduate program. Students wishing to transfer to the School of Business and Organizational Sciences must be in good standing at their previous school or college.

Maximum Recommended Course Loads

	Quarter Hours
Full time students	10
Students working full or part-time	5

Approval for exceptions must be obtained from the Dean or his designee.

Special Student Registration

Only fully admitted graduate students may register for MBA courses with the exception of ACC 6011 and QMB 6603. The special student should be counseled by the appropriate faculty advisor before registering for any courses.

Five thousand-Level Courses

5000-level courses are open to graduate students and seniors. *Master of Science in Management* students may take a maximum of three 5000-level courses. All other courses in the student's program must be at the 6000-level (courses which are only open to graduate students). *Master of Business Administration* students will normally take all work at the 6000 level.

Time Limit

All work applicable to the master's degree must be completed within six years immediately preceding the awarding of the degree, and within five years of the student's first admission to graduate study in the School of Business and Organizational Sciences.

Change of Major

The graduate student who wishes to change his or her program major must submit a graduate change of major request to the Admissions Office of Florida International, and meet the admission and program requirements in effect at the time of the change of major.

Academic Warning, Probation, and Dismissal

WARNING: A student whose cumulative GPA falls below a 3.0 will be placed on *WARNING* indicating academic difficulty.
PROBATION: A student on *WARNING* whose cumulative GPA falls below 3.0 will be placed on *PROBATION* indicating serious academic difficulty. The College/School of the student on *PROBATION* will appropriately communicate conditions which must be met in order to continue to enroll in the program.
DISMISSAL: A student on *PROBATION* whose cumulative and quarterly GPA falls below 3.0 will be automatically dismissed from his/her program and the University.

(Continued)

Business Administration

Master of Business Administration (MBA)

The objective of the *Master of Business Administration* (MBA) program is to provide the student with a general background in the concepts and processes of administration. The MBA program at Florida International is aimed at developing a management generalist who has a breadth of knowledge and understanding, and who is oriented toward pragmatic problem solving. Limited specialized training is available for the student who has the necessary background.

The courses leading to the MBA degree are designed to provide a breadth of experience in the tools and concepts of business administration. The total MBA program is fixed at 60 quarter hours of the MBA courses. The courses are categorized by area, with a regular MBA course and substitute(s) for each category. If a student tests-out or is counseled out of the "regular" course(s), he or she must select one of the substitutes *in the same category.* To be eligible for testing or counseling out of a "regular" course, the student should have previously completed at least three to four courses *in that functional area* at the upper division level with above-satisfactory grades. Electives may be taken from any of the 6000 level offerings in Business Administration. Students whose background in accounting or statistics is evaluated to be inadequate will be required to complete ACC 6011 (Managerial/Financial Accounting) and/or QMB 6603 (Quantitative Methods in Management).

MBA PROGRAM

Area	*Regular Course*	*Possible Substitute Courses*[1]
Economics* (Micro/ Macro)	ECP 6704 Managerial Economics	An elective in either Marketing or Finance. This substitute is only available to an economics major.
Information Systems	MAN 6830 Organization Information Systems	MAN 6833 Information Systems Planning MAN 6836 Systems Analysis
Quantitative Methods*	MAN 6721 Managerial Decision making	
Accounting**	ACC 6313 Accounting for Decision-making	ACC 6411 Managerial Accounting I ACC 6391 Seminar in Managerial Accounting I ACC 6291 Seminar in Financial Accounting Theory ACC 6651 Studies in Auditing ACC 6512 Income Tax Planning and Research
Finance (Corporate)	FIN 6428 Financial Management	FIN 6636 International Finance FIN 6246 Financial Markets FIN 6806 Theory of Finance
Operations Marketing	MAN 6501 Operations Management MAR 6716 Marketing Management	MAN 6836 Systems Analysis MAR 6246 Advanced International Marketing
Management	MAN 6205 Organizational Analysis	MAN 6112 Group Processes in Organizations MAN 6405 Labor Relations MAN 6601 International Management
Environment	MAN 6713 International Business Environment	BUL 6124 Survey of Business Law MAN 6725 International Business Policy
Policy Electives	MAN 6726 Policy Analysis Two 6000 level business administration courses (10 quarter hours), depending upon the waiver of ACC 6011 and QMB 6603	(No substitutes)

[1]See the guidelines under program description above.

*For the student without STA 3132 and QMB 3150 (college algebra and statistics) background, QMB 6603 will replace *one* elective, to be taken *prior* to ECP 6704 and MAN 6721.

**For the student without ACC 3300 and ACC 3303 (financial and managerial accounting) background, ACC 6011 will replace *one* elective, to be taken *prior* to ACC 6313 and FIN 6428. NOTE: The first four categories—economics, information systems, quantitative methods, and accounting—*must* be satisfied *prior* to taking any other MBA courses. The policy course has to be scheduled for the *last quarter* of MBA study. Two electives are allowable within the program, except as noted.

(Continued)

International Business, Management, Accounting

Master of International Business

The *Master of Internationol Business* program is a 60 quarter hour program designed to acquaint students with the international environment and provide basic management tools and solid preparation in one area of specialization. The first block of five core courses will give the student a conceptual framework of international business, economic development and comparative politics. These courses will deal with international corporations, international development and international cooperation. The second block of four courses will give the student a general background in accounting, finance, management, and marketing. Each student will then specialize in one of the major areas (accounting, finance, management, marketing, or banking) taking three additional courses in his/her chosen field. All students will be required to demonstrate competence in quantitative methods, or will be required to take the course QMB 6603. Each candidate will also be required to demonstrate basic reading and/or speaking competence in one major world commercial language.

PROGRAM OF STUDY

		Quarter Hours	
Required Courses:			
INTERNATIONAL STUDIES			20
ECO 5701	The World Economy	5	
INR 6603	World Politics	5	
INR 6605	The Contemporary International System	5	
MAN 6713	International Business Environment	5	
GENERAL BUSINESS			25
ACC 6011	Financial Accounting Analysis	5	
MAN 6205	Organizational Analysis	5	
FIN 6428	Financial Management	5	
MAR 6716	Marketing Management	5	
MAN 6725	International Business Policy	5	
Specialization:			15
ACCOUNTING:			
ACC 6275	International Accounting	5	
ACC 6411	Managerial Accounting	5	
ACC 6582	International Taxation	5	
FINANCE:			
FIN 6246	Financial Markets	5	
FIN 6636	International Finance	5	
FIN 6806	The Theory of Finance	5	
MARKETING:			
MAR 6246	Advanced International Marketing	5	
MAR 6617	Marketing Research	5	
MAR 6717	Advanced Marketing Management	5	
MANAGEMENT:			
MAN 6601	International Management	5	
MAN 6603	Problems in Comparative Management	5	
MAN 6604	Comparative Management Analysis	5	
BANKING:			
BAN 5652	Savings and Loan II. Prequisite BAN 5651 or approval of chairperson	5	
FIN 6625	International Bank Management	5	
FIN 6315	Management of Deposit Institutions	5	
			60

Master of Science in Management (MSM)

The *Master of Science in Management* program provides an in-depth educational experience for the student desiring greater specialization in a particular area.

Concentrations within the *Master of Science in Management* program are avilable in the following areas: Accounting (including taxation). Finance, and Real Estate.

The *Master of Science in Management* program is a one to two year sequence, depending upon the specific program and the applicability of the student's undergraduate course work. The type and number of prerequisite courses varies with the area of concentration. Each student will be counseled concerning his individual needs.

MSM Accounting

The MSM program in Accounting is designed primarily for the student with an undergraduate degree in Accounting. The student with a bachelor's degree in another field may be admitted to this program, but will be required to complete preparatory courses in business and accounting.

Due to varied career opportunities, the MSM program in Accounting is divided into four subprograms, and many variations are possible. The Managerial Accounting program is designed for the student who aspires to be an officer in a business corporation, a governmental unit, or a not-for-profit organization. The Public Accounting program is designed for the student who aspires to be a Certified Public Accountant and leader in the public accounting profession. The International Accounting program is designed for the student who aspires to a professional career with an international accounting firm, a multinational corporation, an international public organization, or an institution in a developing country. The Taxation program is designed for the student who aspires to a career as a tax professional in public accounting, law, industry, education, or government.

A student who earns an MSM in Accounting and successfully passes the Certified Public Accountant Examination usually will qualify to receive a certificate as a Certified Public Accountant. An explanation of the relevant Florida Statue follows.

Florida CPA Requirement

Completion of a *Bachelor of Business Administration* with emphasis in accounting is accepted by the Florida State Board of Accountancy as fulfilling requirements to sit for the Certified Public Accountant Examination. (For the law relating to the practice of public accounting in which Major in Accounting is defined see Rule 21A-9.02 on page 000).

Ordinarily a person passing the CPA Examination must complete one year of employment in the office of a Florida or out-of-state practitioner before receiving a certificate as a Certified Public Accountant. However, the law relating to the practice of public accounting provides in Rule 21A-9.03 that:

> An additional one year accounting course, acceptable in lieu of one year of employment, is defined as a minimum of 30 semester hours or 45 quarter hours, or the equivalent, in courses which would qualify for graduate level credit at accredited colleges or universities, which shall include at least 12 semester or 18 quarter hours, or the equivalent, in post-baccalaureate accounting education. For purposes of this rule, courses used to satisfy Rule 21A-9.02 may not be included in the additional one year accounting course.

Each of the four subprograms (or specializations) in the MSM Accounting program has been designed to allow the student to specialize. Thus, the choice of a specialization predetermines most of a student's course requirements. Each student must work with the graduate advisor in designing his (or her) own program of study in compliance with the requirements of the chosen specialization. The following is the outline of a general program of study:

Finance

PROGRAM OF STUDY

Quarter Hours

Required Courses: selected from the courses below; 15 of the required hours must be at the 6000 level. 20

ACC 5111	Standards and Principles of Financial Accounting	5
ACC 5131	Advanced Financial Accounting	5
ACC 5211	Accounting Problems[1]	5
ACC 5311	Financial Accounting	5
ACC 5511	Accounting for Income Taxes	5
ACC 5611	Auditing	5
ACC 5734	Accounting Information Systems Analysis	5
ACC 5865	Governmental and Institutional Accounting	5
ACC 6275	International Accounting[1,4]	5
ACC 6291	Seminar in Accounting Theory I[1,2]	5
ACC 6391	Seminar in Managerial Accounting I[1,2]	5
ACC 6411	Managerial Accounting[1,2]	5
ACC 6512	Income Tax Planning and Research[1,3]	5
ACC 6531	Taxation of Corporations I[3]	5
ACC 6553	Estates and Gift Taxation[3]	5
ACC 6554	Tax Accounting Theories and Procedures[3]	5
ACC 6555	Taxation of Corporations II[3]	5
ACC 6556	Partnership Taxation and Tax Shelters[3]	5
ACC 6557	Fiduciary Accounting and Taxation[3]	5
ACC 6558	Current Developments in Taxation[3]	5
ACC 6559	Seminar in Taxation[3]	5
ACC 6582	International Taxation[3,4]	5
ACC 6651	Studies in Auditing[1]	5
ACC 6735	Seminar in Accounting Information Systems I[1,2]	5
ACC 6745	Seminar in Accounting Information Systems II[2]	5
ACC 6822	Behavioral Accounting	5
ACC 6832	Accounting and Quantitative Methods	5
ACC 6845	Seminar in Managerial Accounting II[2]	5
ACC 6932	Seminar in Accounting Theory II[1]	5
Masters Project (Required[5])		
ACC 6910		5
Elective: Selected with permission of faculty advisor		20
		45

[1]Designed primarily for the Public Accounting subprogram.

[2]Designed primarily for the Managerial Accounting subprogram.

[3]Designed primarily for the Taxation subprogram

[4]Designed primarily for the International Accounting subprogram.

[5]With the approval of the graduate advisor, a student may substitute a graduate level, research-oriented accounting course for ACC 6910.

MSM Finance

PURPOSE: The graduate program leading to the degree of *Master of Science in Management* (MSM) is offered for students who want to concentrate in the specific area of Finance. The MSM Program in Finance is designed to develop analytical skills and decision-making abilities in the solution of problems related to obtaining and utilizing funds. Graduates will be able to demonstrate a suitable competence in handling complex financial and investment situations. Graduates also will have a good institutional knowledge of financial and capital markets, instruments, and current developments and opportunities available to investors, financial institutions, and corporate enterprise.

CONTENT AND STRUCTURE: The program consists of sixty quarter hours (twelve courses) divided into three groups as follows:

1. Six general/functional core courses: All participating students are required to take these courses. However, eligible students, with counselor approval, can waive several of these courses based on their previous education. Waived courses become electives. Electives can be selected from the Finance specialization courses or Accounting, Economics, Real Estate, or Computers. This feature differs from the MBA Program which has few electives.
   A. Three of the core courses are of the general background type. They cover the subject of general management, economics, and quantitative methods.
   B. Three of the core courses cover specific functions in business such as accounting, the processing of information, and marketing.
2. Three Finance core courses: All MSM Finance students are required to take three general Finance courses which cannot be waived. The courses are designed to give the student a working knowledge of basic financial management, financial theory, and financial markets.
3. Three finance specialization courses: Each student will select courses from a number of finance offerings that will be available. A further concentration in a particular subject such as corporate finance, investment, or financial institutions, is possible and encouraged. Individual faculty counseling is available to provide assistance in designing a field of specialization, if desired.

The sixty quarter hours may be reduced to forty-five for students who possess a Master's Degree in an approved field. Up to two graduate courses may be transferred in from another accredited school, even if no advanced degree was obtained.

Generally, students with the BBA degree will satisfy the general core course requirements and they may enroll in additional specialization courses. Functional core courses may also be waived with the approval of the faculty counselor. In this case, students are encouraged to substitute for each waived course a graduate course in the same field. Thus, the program is sufficiently flexible to provide depth in finance and/or breadth in business and management.

COURSES

General Core Courses

ECP 6704	Managerial Economics
MAN 6205	Organizational Analysis
QMB 6603	Quantitative Methods in Management

Functional Core Courses

ACC 6011	Financial Accounting Analysis
MAN 6830	Organizational Information Systems
MAR 6716	Marketing Management

Finance Core Courses

FIN 6246	Financial Markets and Institutions
FIN 6428	Financial Management
FIN 6806	Theory of Finance

Specialization Courses

BAN 5652	Savings and Loans II. Prerequisite BAN 5651 or approval of Chairperson.
FIN 5314	Working Capital Management
FIN 5473	Small Business Finance
FIN 5515	Futures Trading
FIN 6315	Management of Deposit Institutions (Banking)
FIN 6316	Management of Nondeposit Institutions
FIN 6325	Current Issues in Commercial Banking
FIN 6426	Financial Management Policies
FIN 6436	Capital Budgeting and Long-term Resource Allocation

Real Estate, Certificate Programs

Banking

FIN 6456	Quantitative Methods in Financial Analysis
FIN 6516	Securities Analysis
FIN 6525	Portfolio Management
FIN 6636	International Finance
FIN 6716	Financial Management of Governmental Organizations
FIN 6906	Independent Study in Finance
FIN 6915	Master's Project in Finance
FIN 6936	Special Topics in Finance

MSM Real Estate and Urban Development

A *Master of Science in Management* with a concentration in Real Estate is available to persons interested in graduate work in Real Estate.

University graduates in Real Estate find employment in: land planning and development; real estate investing and counseling; environmental planning; development of new cities; international real estate; recreational land use development; construction management; corporate real estate divisions; governmental agencies; appraising; marketing of residential, commercial, and industrial properties; property management, such as of large apartment complexes, office buildings, and shopping centers; conventional and creative real estate financing through financial institutions, such as commercial banks, savings and loan associations, life insurance companies, mortgage bankers and mortgage brokers; and teaching, in the rapidly growing field of real estate education. Further, competent real estate talent is being called upon for participation in the rapidly growing field of real estate syndication, limited partnerships and joint ventures.

Program Prerequisities: one semester or quarter of financial management; two semesters or quarters of economics; or an undergraduate major in business administration.

Following a student's admission to the graduate program in Real Estate and Regional Development, each graduate student will develop an individual program of studies agreed to by his faculty advisor.

Certificate Programs: General Information

The overall purpose of the certificate programs is to provide *practicing managers* with advanced training in the techniques and methods pertinent to their areas. The programs are for both degree and non-degree seeking students, and are available in the areas of Banking, Insurance, Information Systems, Marketing, Personnel Management, Savings and Loan, and Transportation Management. A certificate is awarded upon successful completion of each program.

Banking Certificate General Description

The CIB (Certificate in Banking) core program consists of four undergraduate/graduate Finance courses representing approximately 200 contact hours between instructors and participants. Participants enrolled in the Certificate program may elect to take each course for a grade or on a credit-only basis. Upon successful completion of the four course sequence, a Certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

Participants with the appropriate educational background are expected to complete the Certificate program within a twelve-month period. This could be accomplished by enrolling in one finance course each quarter for four successive quarters. Applicants not possessing the appropriate educational background may fulfill the program prerequisities by successfully completing ACC 3300, FIN 3403, and ECO 3432.

Program Goals

1. To acquaint the participant with the investment, financing, and other policy decisions within the scope of the corporate finance officer's authority structure.
2. To acquaint the participant with the functioning of the American capital markets and the institutions which service these markets.
3. To survey commercial bank management techniques and methods of operation. Emphasis is placed on the goals of the commercial bank and the methods of obtaining these goals.
4. To develop in the participant the ability to systematize the business loan evaluation process in order to make sound rational credit-loan decisions.

Course Requirements

1. Basic requirements: students with an undergraduate degree in business administration or those who have completed equivalent courses may have these courses waived.

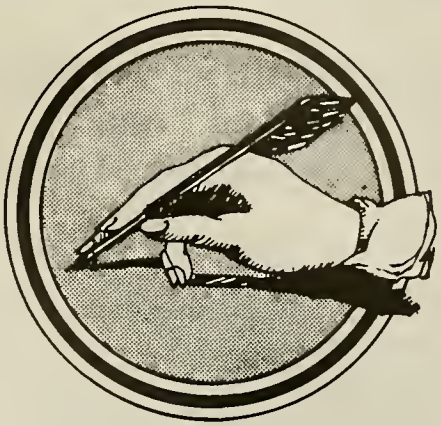
ACC 3300	Accounting for Decisions
FIN 3403	Financial Management
ECO 3432	Applied Macroeconomics

2. Specific program requirements for the Certificate in Banking program.

FIN 5406	Policies for financial management—The process of securing and allocating funds within the business organization, with emphasis on the relevant financial decision-making and policy aspects.
FIN 5305	Financial intermediaries and markets—The role of financial institutions; the sources and uses of funds of financial intermediaries; the objectives and constraints of these intermediaries; and the supply and demand for loanable funds in different financial markets.
FIN 5326	Commercial bank management—The management of bank assets and liabilities; specialized banking functions; and the role of the commercial bank in financing business.
FIN 5345	Credit analysis and loan evaluation—Topics to include: introduction to commercial lending; secured lending: accounts receivable financing and factoring; inventory financing; introduction to lending vehicles; short term lending; domestic taxation; consolidations, forecasting and intermediate term cash flow lending; term loan agreements/covenants; subordinations and guarantees; foreign exchange; international transactions; and leasing.

Enrollment in the program is limited to forty students each year and is open only to bank personnel. Each course will meet for four hours and 10 minutes one day each week during the academic quarter. Classes are normally held at the Florida International University Downtown Center, which is currently located at the Miami Dade New World Center.

Certificate Programs
Insurance, Information Systems, Marketing, Personnel Management



Insurance Certificate

The Certificate Program in Professional Insurance Accomplishment is designed to enable individuals in (or wishing to enter) the insurance industry to obtain recognition for their attainments in insurance education.

The courses leading to the Certificate may be taken by both degree-seeking students as part of their regular programs, or by special, non-degree seeking students who may be seeking professional recognition and qualifications.

The Certificate Program requires participants to obtain 30 quarter hours, or six five-credit hour classes, in 4000 level insurance courses. The Insurance Certificate requires participants to take five required courses and one elective course. Students must earn a "C" grade or better in each course taken.

Those required are:

RMI 4015	Introduction to Insurance
RMI 4212	Property Insurance I
RMI 4213	Property Insurance II
RMI 4220	Casualty Insurance I
RMI 4221	Casualty Insurance II

The elective should normally be selected from such courses as:

RMI 4115	Life Insurance
RMI 4135	Employee Fringe Benefit Programs
RMI 4145	Business and Estate Insurance Planning

Inquiries concerning the Certificate in Professional Insurance Accomplishment should be addressed to the Department of Finance and International Business.

Information Systems Certificate

This program is designed as a three course undergraduate sequence for systems professionals and users heavily involved in information systems development. These courses may be taken as part of a regular degree program or as a special student not pursuing a formal degree. The purpose of the program is to provide advanced study to complement the work experience of practitioners who deal with information systems problems on a regular basis. The sequence consists of three courses to provide this complementary background.

MAN 4820	Systems Analysis and Design
MAN 4821	Information Systems Development
MAN 4822	Systems Management

Additional information about these offerings may be obtained from the IS Certificate Program Coordinator in the Department of Management.

Marketing Certificate

A Certificate in Marketing program is offered through the Department of Marketing. The Certificate program is open to both degree and non-degree seeking students interested in acquiring knowledge and skills in Marketing, and documentary evidence of their accomplishment. The Certificate program is aimed specifically at majors throughout the University, particularly those students in the College of Arts and Sciences and the professional schools, and at individuals currently working in the business world. The Certificate program seeks to enhance individual capabilities for the discharge of responsibilities at a high performance level, while giving a measure of professional recognition for the achievement of significant competence in the field.

The Certificate program is comprised of a set of six five-credit hour undergraduate marketing courses—one introductory course at the junior (3000) level, the prerequisite for all the other courses in the program, and five at the senior (4000) level.

There are three Required Courses:

MAR 3023	Marketing Management
MAR 4153	Retailing Management I
MAR 4303	Advertising Management

For their electives, students are recommended to take three courses from the following regularly offered Marketing classes and other selected courses:

MAN 3712	Business & Society
MAR 4154	Cases in Retailing Management
MAR 4713	Cases in Marketing Management
MAR 4243	International Marketing
MAR 4503	Consumer Behavior
MAR 4613	Marketing Research
MAR 4344	Advertising Campaign Management
MAR 4103	Personal Selling
MAR 4203	Marketing Channels
MAR 4723	Marketing of Small Business Enterprises

On satisfactory completion of the program, signified by a "C" grade or better in each course, students will, on application, receive a Certificate in Marketing signed by the Departmental Chairperson and Dean of the School of Business and Organizational Sciences.

Personnel Management Certificate

The objective of the Certificate program in Personnel Management is to provide training in advanced personnel management techniques and methods to personnel professionals who do not necessarily wish to seek a degree. The program is aimed at developing immediately applicable skills in individuals who are assumed to already have an adequate foundation in the concepts and role of the personnel management function. A Certificate of Completion signed by the Department Chairperson and the Dean of the School will be awarded to any student who completes one prerequisite statistics course and the program of four five-credit hour courses (20 hour total) in the personnel management areas of concentration at the graduate level. A "B" average is required for successful completion of the program.

*Course Sequence:*The Certificate program consists of the following four required courses, which must be taken in this order:

MAN 5930	FALL: Seminar in Personnel Management
MAN 6321	WINTER: Personnel Selection and Placement
MAN 6405	SPRING: Labor Relations
MAN 6351	SUMMER: Personnel Training and Development

For students who desire to take additional elective courses, the following are recommended:

MAN 6331	Compensation Administration
MAN 6411	Collective Bargaining
MAN 4151	Behavioral Science in Management

For information concerning admission to the program contact the Division of Management.

Certificate Programs
Savings and Loan
Transportation Management

Savings and Loan Certificate

The certificate program consists of four undergraduate/graduate finance courses representing approximately 200 contact hours between instructors and participants. Participants enrolled in the certificate program may elect to take each course for a grade or on a credit-only basis. Upon successful completion of the four-course sequence, a certificate signed by the Dean of the School of Business and Organizational Sciences will be awarded.

The program should be of interest to persons currently employed at the middle management level in savings and loans who wish to sharpen their industry knowledge, i.e., branch managers, auditors, data processing people, management track personnel, individuals who sell services, and individuals (although not currently employed in a savings and loans) who desire a career in savings and loans management.

The program qualifies for tuition reimbursement at many of the participating institutions. See your personnel officer or training director for additional information.

PROGRAM GOALS: To acquaint the participant with the functioning of the American captial markets and the institutions which service these markets.

To survey savings and loan management techniques and methods of operation. Emphasis is placed on the goals of the savings and loan; and the methods of reaching these goals.

To develop within the participant the ability to systematize the loan evaluation process such that a sound rational credit-loan decision can be made. With the savings and loan program, emphasis will be placed upon the comprehension of the savings, investment, insurance and annuity goals of the individual (personal finance).

ADMISSION TO THE PROGRAM: A working knowledge of financial accounting is a prerequisite for admission to the certificate program. Specifically, the prerequisite can be met through either appropriate work experience, successfully passing test-out examinations, or successful completion of Accounting 3300 (Accounting for Decisions), Economics 3432 (Applied Macroeconomics), and Finance 3403 (Financial Management) or their equivalent. Applications to the program are evaluated by an admissions committee composed of both finance faculty and local savings and loan personnel.

Graduate students can transfer two of the certificate courses for master's degree credit while undergraduate students can transfer all of the courses toward bachelor's degree credit, with prior advisor approval.

The required courses are:

FIN 5305	Financial Intermediaries and Markets
BAN 5651	Savings and Loans I
BAN 5652	Savings and Loans II
BAN 5653	Savings and Loans III

Transportation Management Certificate

The Department of Marketing offers an undergraduate Certificate Program in Transportation Management. The program is a vehicle to enable students employed in, or wishing to enter, the transportation industry to obtain recognition for their attainments in transportation education.

The courses leading to the Certificate may be taken by both degree-seeking students as part of their regular programs, or by special, non-degree seeking students who wish to attain professional recognition and qualifications.

The Certificate program requires participants to obtain 30 quarter hours, or six five-credit hour classes (of which 20 hours are required, 10 hours elective) in 4000-level transportation courses. Students must earn a "C" grade or better in each course taken.

The required courses are:

TRA 4240	Transportation Systems and Services
TRA 4410	Air Transportation
TRA 4411	Airport Management
TRA 4412	Air Carrier Management

The electives should be selected from:

TRA 4510	Mass Transportation and Urban Problems
TRA 4320	Transportation Regulation
TRA 4101	Transportation Rate Making
TRA 4012	Transportation Logistics
TRA 4380	Transportation Policy

Course Descriptions

BUSINESS ADMINISTRATION CORE COURSES

Definition of Prefixes

ACC–Accounting; CIS–Computer and Information Systems; FIN–Finance; MAN–Management; MAR–Marketing; QMB–Quantitative Methods in Business; STA–Statistics.

ACC 3300 Accounting for Decisions (5)(F,S,W,SS)
Accounting concepts and techniques essential to administration of a business enterprise and the determination of income and financial posisions; and various aspects of employment legislation, as well as other select topics.

ACC 3303 Accounting for Planning and Control (5)(F,W,S,SS)
Use of accounting concepts, techniques and financial data as an aid to management planning, coordination and control. Topics covered include cost behavior and control; budgeting; analysis concepts; performance measurement and analysis; and capital budgeting. Prerequisite: ACC 3300, or equivalent.

CIS 3000 Introduction to Information Systems (5)
Survey of the major problems of information systems and information processing in organizations. Brief study of basic computer concepts; the information systems development cycle; the relation between information systems and decision-making; and the general systems framework for information problems. Prerequisites: Completion of the Computer Programming Proficiency Requirement.

ECO 3003 Economics, Man and Society (5)(F,S,W,SS)
Relationship of economics to individual and group action. Identification of economic and non-economic objectives and problems. Analysis of economic behavior of individuals, business firms, public agencies, and interest groups. Public issue interpretation in the light of economic theory.

ECO 3432/3202 Applied Macroeconomics (5)(F,W,S,SS)
Aggregate economic performance and business conditions analysis. Analysis of the nature and causes of business fluctuation. Economic expansions and stagflation; public policies for economic stability; fiscal policy, monetary policy and incomes policy. Sectoral analysis and macroeconomic forecasting. Prerequisite: ECO 3003, or equivalent.

FIN 3403 Financial Management (5)
A study of financial decision making in the corporate form of enterprise. An analysis of the sources and uses of funds. Emphasis is placed on working capital management; capital budgeting techniques; short and long term financing; and capital structure and the value of the firm. Prerequisite: ACC 3300, or equivalent.

MAN 3010 Organization and Management (5)
An analysis of organizations and the management processes of planning, organizing,

(Continued)

Course Descriptions
Business Administration Core
Accounting

directing, and controlling in the context of socio-technical systems. Individual, group, intergroup, and organizational responses to various environments and technologies are studied, as are pertinent techniques of manpower management.

MAN 3503 Managerial Decision Making (5)
This course concentrates on practical decision problems for the manager in an organization. Emphasis is placed on the environment and on the definition of and practical approaches to solving managerial problems. Topics to be included are decision-making theory, linear programming, network analysis, inventory models and simulation. Prerequisites: College Algebra, Introductory Statistics, and QMB 3150.

MAN 3602 International Business (5)
Introductory analysis of the business system and management decision-making in the international operation of enterprise. Special emphasis given to international trade and investment; foreign exchange; financial markets; political and cultural interactions between host societies and multinational enterprise. Prerequisite: ECO 3432.

MAN 3712 Business and Society (5)
An examination of the interaction between business and the social, political, and legal order. Analysis of the appropriate and actual relationships and responsibilities of business to its various publics. The nature of property and profits; the balancing of claims of owners, employees, customers and citizens; elements of constitutional law; competition and monopoly; antitrust policies and practices. Stress on the broad effects of the total environment upon the administration of the private sector of organization. Prerequisite: ECO 3432 or equivalent.

MAN 4722 Policy Analysis (5)
The use of cases, guest lecturers, and gaming, to integrate analysis and measurement tools, functional areas, and public policy issues. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Prerequisite: Completion of all core requirements. Must be taken in last academic quarter of senior year.

MAR 3023 Marketing Management (5)(F,W,S,SS)
A descriptive study emphasizing the functions and institutions common to marketing systems.

MAN 4630 International Business Policy (5)
Project and case analysis of international business decision-making. Cross-functional approach emphasizes interactions among decisions, including those relating international and domestic activities. Focus is on integrating and evaluating decisions in a multinational enterprise environment. Should be taken in last quarter of senior year; open only to international business majors, in lieu of MAN 4722.

QMB 3150 Application of Quantitative Methods in Business (5)
Application of quantitative techniques to business problems. General topics include the process of quantitative decision making, sampling, and forecasting. The latter part of the course will concentrate on specific techniques applicable to the student's functional major. Prerequisites: College Algebra, Introductory Statistics.

STA 3132 Quantitative Methods for Administration (5)(F,S,W,SS)
The use of statistical tools in management; introduction of probability, descriptive statistics, and statistical inference as included.

ACCOUNTING

Definition of Prefixes
ACC–Accounting; BUL–Business Law.

ACC 3300 Accounting for Decisions (5)
Accounting concepts and techniques essential to administration of a business enterprise and the determination of income and financial position; asset and equity accounting in proprietorships and corporations.

ACC 3882 Introduction to the Accounting Process (2)
Analysis of the accounting cycle and the technical procedures used in classifying, summarizing, and interpreting the transactions of a business entity.

ACC 3949 Cooperative Education-Accounting I (1–5)
A special program permitting accounting students to work during alternating quarters, up to a maximum of 2 quarters, in a public accounting firm, an industrial or a not-for-profit enterprise, or a governmental agency, in a job related to the area of concentration in their university program.

ACC 4102 Financial Accounting I (5)
An exploration of concepts, standards, and principles underlying financial reporting, with emphasis on the measurement, analysis, and interpretation of income and changes in financial position (funds flow). Prerequisite: At least 9 quarter hours of introductory financial and managerial accounting, with grades of "C" or better; or ACC 3300 with a grade of "B" or better.

ACC 4122 Financial Accounting II (5)
A continuation of ACC 4102, with emphasis on the accounting concepts, standards, and principles underlying the measurement and reporting of financial position. Prerequisite: ACC 4102, with grade of "C" or better.

ACC 4201 Financial Accounting III (5)
A continuation of ACC 4122, with emphasis on accounting for partnerships, consolidated financial statements, and financial statement analysis. Prerequisite: ACC 4122, with grade of "C" or better.

ACC 4248 Topics in Financial Accounting (1–5)
An in-depth study of recent developments in financial accounting. Prerequisite: ACC 4122.

ACC 4271 International Accounting (5)
Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurement; and the role of accounting in national economic development.

ACC 4301 Managerial Accounting (5)
Determination and control of production costs; job order and process systems; actual and standard costs, budgetary control; cost and profit analyses; and other methods of performance measurement and analysis. Prerequisite: ACC 4102 and MAN 3503 with grades "C" or better.

ACC 4348 Topics in Managerial Accounting (1–5)
An in-depth study of recent developments in managerial accounting. Prerequisite: ACC 4301, or equivalent.

ACC 4501 Income Tax Accounting (5)
A survey of federal income taxation with primary emphasis on the taxation of individuals and corporations. Prerequisite: ACC 4122 with grade of "C" or better.

ACC 4522 Taxation of Corporations and Partnerships (5)
An in-depth study of income taxation of corporations and partnerships, including tax planning. Prerequisite: ACC 4501, or 5511, or equivalent.

ACC 4548 Topics in Taxation (5)
An in-depth study of recent legislative, administrative, and judicial developments in taxation. Prerequisite: ACC 4501, or equivalent.

ACC 4601 Auditing (5)
Standards and procedures applied by independent public accountants, ethics and responsibilities of auditors, development of audit programs, accumulation of audit evidence, and reporting. Prerequisite: ACC 4122 with grade of "C" or better.

(Continued)

Accounting

ACC 4648 Topics in Auditing (5)
An in-depth study of recent developments in auditing. Prerequisite: ACC 4601, or equivalent.

ACC 4731 Accounting Systems and Managerial Analysis (5)
A continuation of ACC 4301, with emphasis on management performance measurement and analysis; design of accounting systems; internal control; management systems audits; and use of data processing equipment. Prerequisite: ACC 4301 and COP 3172 with grades "C" or better, and knowledge of a computer language.

ACC 4803 Professional Responsibility of the Accountant (5)
Rights and duties of the Certified Public Accountant in respect of professional liability, securities regulation and tax practice. Prerequisite: ACC 4122 with "C" or better.

ACC 4905 Independent Study in Accounting (1–10)
Individual conferences, supervised readings, and reports on personal investigations. Written permission of the Instructor, Department Chairperson, and Dean required.

ACC 4930 Special Topics in Accounting (1–10)
For groups of students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Written permission of the Instructor, Department Chairperson, and Dean required.

ACC 4949 Cooperative Education-Accounting II (1–5)
A continuation of ACC 3949.

ACC 5111 Standards and Principles of Financial Accounting (5)(F,S)
A survey of official pronouncements on accounting standards and principles. Prerequisite: ACC 4122 or 5311, or equivalent.

ACC 5131 Advanced Financial Accounting (5)
Accounting for partnerships, consolidated financial statements, diversified and multinational corporations, fiduciary relationships, and not-for-profit institutions. Prerequisite: ACC 4122 or ACC 5311, or equivalent, or consent of Instructor. (No credit given if ACC 4201 or equivalent completed previously.)

ACC 5211 Accounting Problems (5)(W)
Intensive study of selected advanced accounting topics, including problems of multiple ownership; fund accounting; actuarial applications; questions and problems from recent CPA examinations. Prerequisite: ACC 5131, or equivalent, or consent of Instructor.

ACC 5311 Financial Accounting (5)
An exploration of concepts, standards, and principles underlying financial reporting, with emphasis on the measurement, analysis, and interpretation of assets, equities, income, and changes in financial position. Prerequisite: ACC 3303 or equivalent, and consent of Instructor; or ACC 6313.

ACC 5511 Accounting for Income Taxes (5)
Exploration of concepts of federal income taxes and tax planning, with emphasis on the determination of taxable income for the individual, the partnership, and the corporation. Prerequisite: ACC 5311 or equivalent, or consent of Instructor. (No credit given if ACC 4501 or equivalent completed previously.)

ACC 5611 Auditing (5)
The standards and procedures applied by independent public accountants, and their ethical considerations and responsibilities in the rendering of opinions on enterprise financial statements; internal auditing and control; and accounting systems. Prerequisite: ACC 5311, or equivalent, or consent of Instructor. (No credit given if ACC 4601, 4731, or equivalent completed previously).

ACC 5734 Accounting Information Systems Analysis (5)
Coverage of accounting usage of computers. Emphasis on auditing and control of EDP systems. Use of flowcharting; decision tables; computer software; and case studies. Coverage of EDP topics in the CPA examination. Prerequisite: ACC 3300 or CIS 3000 or equivalent; or ACC 6011 and MAN 6830 or equivalent.

ACC 5865 Governmental and Institutional Accounting (5)
Budgeting, accounting, and reporting standards and practices for government and other not-for-profit entities. Prerequisite: ACC 4122 or ACC 5311, or equivalent.

ACC 6275 International Accounting (5)
Comparative analysis of accounting concepts and practices in different countries; international accounting standards; problems of accounting for multinational corporations, including transfers of funds and income measurements; the role of accounting in national economic development. Prerequisite: ACC 5131, or equivalent, or consent of Instructor.

ACC 6291 Seminar in Financial Accounting Theory I (5)(W)
A study of the theoretical structure of accounting, with special attention to asset and income definition, recognition, and measurement; and an appraisal of pronouncements of professional accounting organizations. Prerequisite: ACC 5131, or equivalent, or consent of Instructor.

ACC 6391 Seminar in Managerial Accounting I (5)
Analysis of transfer pricing; product pricing; incremental profit analysis; decision models; alternative performance measurement techniques; and other advanced topics. Prerequisite: ACC 4301 or ACC 6313, or equivalent.

ACC 6411 Managerial Accounting (5)
In-depth study of the determination and control of production cost; budgetary control; cost volume and profit analyses; and considerations of alternative methods of performance measurement and analysis. Prerequisite: ACC 4301, or ACC 6313, or equivalent.

ACC 6512 Income Tax Planning and Research (5)
An in-depth study of the taxation and planning aspects of a variety of business and other transactions. Emphasis will be upon developing an ability to perceive tax issues and to conduct research to resolve them. Prerequisite: ACC 4501 or ACC 5511, or equivalent.

ACC 6513 Tax Accounting for Managers (5)
An exploration of the concepts of federal income taxation and tax planning, from the point of view of the manager.

ACC 6531 Taxation of Corporations I (5)
The study of the federal tax consequences of the formation, operation, reorganization and liquidation of corporations; election of Subchapter S status; the federal tax considerations in choosing the corporation as a vehicle for commercial activity. Prerequisite: ACC 6512, or permission of the Instructor and the advisor for the taxation specialization.

ACC 6553 Estate and Gift Taxation (5)
The study of the federal estate tax and federal gift tax provisions. Prerequisite: ACC 6512, or permission of the Instructor and the advisor for the taxation specialization.

ACC 6554 Tax Accounting Theory and Procedures (5)
A study of the tax accounting concepts and the judicial doctrines inherent in the federal tax law and in tax planning. Prerequisite: ACC 4501 or ACC 5511, or equivalent.

ACC 6555 Taxation of Corporations II (5)
An in-depth study of the tax benefits inherent in multiple corporate groups. Determining income as a single taxable entity is emphasized. The limitations on the group as a whole, especially liberalized carryover provisions, are also explored. Prerequisites: ACC 6512 and ACC 6531.

(Continued)

Accounting

ACC 6556 Partnership Taxation (5)
The intensive study of the formation, operation, and dissolution of a partnership (general and limited), and the use of the partnership to establish and operate tax sheltered investments in real estate, oil and gas, leasing, farming, cattle, etc. Prerequisite: ACC 6531 or permission from the Instructor.

ACC 6557 Fiduciary Accounting and Taxation (5)
The study of the income taxation of estates, trust, and the beneficiaries thereof, including the determination of distributable net income, and throwback rules. The grantor trust and income in respect of a decedent is emphasized. The use of trusts in tax and estate planning is also explored. Prerequisites: ACC 6512 and ACC 6553.

ACC 6558 Current Developments in Taxation (5)
The study of recent legislative, administrative and judicial developments affecting taxation is effected through the application of research techniques to income tax and estate tax planning. Prerequisites: ACC 6512 and ACC 6554.

ACC 6559 Seminar in Taxation (5)
Intensive study of a particular topic or a limited number of topics. The topics included in this course will depend upon the availability of faculty with expertise in the following special classes of tax problems: advanced corporate taxation; taxation of deferred compensation; taxation of not-for-profit institutions; interstate, state and local taxation; and others, as current developments demand. Prerequisites: ACC 6512 and ACC 6554.

ACC 6582 International Taxation (5)
The complex federal income tax provisions applicable to the foreign income of U.S. citizens, residents, and corporations, and to foreign persons with U.S. income is surveyed. The tax policy of developing and developed countries with respect to foreign investment is discussed in the context of international tax planning. Prerequisite: ACC 6512 or permission of the Instructor and the advisor for the taxation specialization.

ACC 6612 Auditing for Managers (5)
An exploration on the concepts and objectives of internal control, auditing, and audit reports from the point of view of the manager.

ACC 6651 Studies in Auditing (5)(S)
Professional and technical aspects of auditing practice; ethics and legal responsibilities; review of field work emphasizing materiality, sampling, and working papers, reporting problems including long-form and special purpose reports; study of recent auditing developments. Prerequisite: ACC 4601 or ACC 5611, or equivalent.

ACC 6735 Seminar in Accounting Information Systems I (5)
Application of general systems concepts to accounting; operational, and related planning and control information requirements. Data base management systems, on-line real-time systems, time-sharing, etc., and applications in accounting. Emphasis on the analysis of computer-based controls. Case histories and projects. Prerequisite: ACC 5734, or equivalent.

ACC 6745 Seminar in Accounting Information Systems II (5)
A continuation of ACC 6735, with emphasis on the theories underlying complex information systems. Prerequisite: ACC 6735, or equivalent.

ACC 6822 Behavioral Accounting (5)
Study of the effect of the process and products of accounting and of the relation of changes in the process and products to individual and group behavior; consideration of ways in which accounting can aid individuals and organizations to attain their goals. Prerequisite: ACC 4121 or ACC 5311 and 4301 or equivalents.

ACC 6832 Accounting and Quantitative Methods (5)
Study of statistical and management science techniques that are or may be utilized in financial and managerial accounting. Prerequisites: MAN 3503, QMB 3150 and CIS 3000, or equivalents.

ACC 6845 Seminar Managerial Accounting II (5)
An intensive study of the controllership function in corporate organizations; an appraisal of the controller's role in planning, accounting for, and evaluating company performance. Prerequisite: ACC 6391, or equivalent.

ACC 6907 Independent Study in Accounting (1–5)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty advisor and Department Chairperson required.

ACC 6910 Master's Project (5)(F,W,S,SS)
An individualized research project and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program.

ACC 6932 Seminar in Financial Accounting Theory II (5)
A continuation of ACC 6291, with emphasis on the problems of accounting for price-level changes and other current issues. Prerequisite: ACC 6291, or equivalent.

ACC 6935 Special Topics in Accounting (1–5)
Intensive study for groups of students of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty advisor and Department Chairperson required.

BUL 4100 Legal Environment of Business (5)
Legal environment of business; analysis of legal principles affecting management; the role of law in business decisions; the legal tool as a system for order in the business arena; the effectiveness of the legal tool as a planning instrument. This course is a study of the importance of the impact of the law and legal institutions on the field of commerce, with attention to the regulation of competition through analysis of antitrust legislation; the workings of administrative law; the formulation of judicial decisions; the power of constitutional provi-

BUL 4111 Business Law I (5)
Principles of law affecting the legal environment of business; contract law; laws related to sales, torts, agencies and employment; legal relations of government and business.

BUL 4112 Business Law II (5)
Bailments, shipment and sale of goods; suretyship; bankruptcy; commercial paper; real and personal property; insurance; relevant provisions of the uniform commercial code.

BUL 4650 Special Topics in Business Law (1–10)
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

BUL 4661 Law for Accountants (5)
A survey of select topics in the legal environment in which business operates, with emphasis on the laws dealing with contracts; sales; agencies; partnerships; corporations; and other topics of direct interest to students majoring in accounting. (The course is, however, open to non-accounting students.)

BUL 4905 Independent Study in Business Law (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

BUL 6124 Survey of Business Law (5)
Graduate level survey of business law, which examines the social purposes, functions and forms of the law and the courts, particularly as they relate to business organizations.

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BUL 6651 Special Topics in Business Law (1–10)
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

BUL 6906 Independent Study in Business Law (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

FINANCE

Definition of Prefixes
FIN–Finance. BAN–Banking.

BAN 5651 Savings and Loans I (5)
Theory of Corporate financial analysis, analysis of personal financial position, savings and loan cash flows, measures branch profitability, commercial banking and savings and loans, special problems of savings and loan management. Prerequisite: None.

BAN 5652 Savings and Loans II (5)
Financial management of savings and loan associations and other mortgage lenders, supply and demand of mortgage funds; state and federal regulatory bodies' legal and institutional characteristics related to mortgage markets. Prerequisite: BAN 5651 or approval of Chairperson.

BAN 5653 Savings and Loan III (5)
Cases in savings and loan association assets and liabilities management. Includes emphasis on role of savings and loans in personal finance, uses of insurance, annuities, pensions, Keogh and IRA Plans. Prerequisite: BAN 5652.

FIN 3100 Personal Finance and Resource Management (5)
The application of organization, finance, and management concepts and methods, to aid the individual in making personal financial and career decisions. This course CANNOT be used to meet the finance major concentration requirements.

FIN 3949 Cooperative Education in Finance(5)
Quarters of full-time classroom study are alternated with quarters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: None.

FIN 4303 Financial Markets and Institutions (5)
Financial markets and the role of financial intermediaries in these markets. Emphasis will be upon the objectives and policies of financial intermediaries within the constraints of law and regulatory authorities. Prerequisite: FIN 3403, or equivalent.

FIN 4313 Financial History of the United States (5)
Origins of the American financial system. Early American history of financial intermediaries. Evolution in financial legislation, policy, practice, and role of financial intermediaries. Role of the Federal Reserve System in financial markets and influence on financial policy. Prerequisite: FIN 3403, or equivalent.

FIN 4324 Commercial Bank Management (5)
The management of bank assets and liabilities; specialized banking functions; and the role of the commercial bank in financing business. Prerequisite: FIN 3403, or equivalent.

FIN 4404 Policies for Financial Management (5)
The process of securing and allocating funds within the organization, with emphasis on the relevant financial decision-making and policy aspects. Prerequisite: FIN 3403, or equivalent.

FIN 4419 Capital Budgeting Techniques and Applications (5)
The application of contemporary theory and techniques to the problem of long term resource allocation. A review of capital budgeting techniques and the implications the investment and management of capital have toward the goal of maximizing the value of the firm. Prerequisite: FIN 4404, or equivalent.

FIN 4502 Securities Analysis (5)
The examination of the determinants of the values of common and preferred stocks, bonds, and warrants. The timing of security purchases and sales and an introduction to portfolio construction techniques. Prerequisite: FIN 3403, or equivalent.

FIN 4504 Portfolio Analysis and Management (5)
Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 4502, or equivalent.

FIN 4611 International Financial Management (5)
Capital budgeting operational analysis, and financial decisions in the multinational context. Working capital management and intrafirm fund transfers. Measurement and evaluation of risk of internationally diversified assets. Prerequisite: FIN 3403, or equivalent.

FIN 4713 Financial Policies for Not-For-Profit Organizations (5)
Financial processes relevant to governmental and other not-for-profit organizations. Emphasis is on legal, political, and market constraints on securing, managing, and expending funds. Prerequisite: FIN 3403, or equivalent.

FIN 4904 Independent Study in Finance (1–10)
Individual conferences, supervised readings, reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

FIN 4934 Special Topics in Finance (1–5)
For groups of students who desire an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

FIN 4949 Cooperative Education in Finance(5)
Quarters of full-time classroom study are alternated with quarters of full-time remunerated employment which closely relates to the student's area of academic study. Carefully designed and monitored work assignments are intended to develop the student's understanding of the relationship between theory and practice in an authentic work environment. Prerequisite: None.

FIN 5305 Financial Intermediaries and Markets (5)
The role of financial institutions; the sources and uses of funds of financial intermediaries; the objectives and constraints of these intermediaries; and the supply and demand for loanable funds in different financial markets. Prerequisite: Limited to people admitted to Certificate in Banking program *only*.

FIN 5314 Working Capital Management (5)
Intermediate theories and techniques of cash, accounts receivable, inventory, and accounts payable management. Prerequisite: FIN 3403 or FIN 6428, or equivalent.

FIN 5326 Commercial Bank Management (5)
The management of bank assets and liabilities; specialized banking functions; and the role of the commercial bank in financing business. Prerequisite: Limited to people admitted to Certificate in Banking program *only*.

(Continued)

Finance

FIN 5345 Credit Analysis and Loan Evaluation (5)
Topics to include: introduction to commercial lending; secured lending; accounts receivable financing and factoring; inventory financing; introduction to lending vehicles; short term lending; domestic taxation; consolidations; forecasting and intermediate term cash flow lending; term loan agreements/covenants; subordinations and guarantees; foreign exchange; international transactions and leasing. Prerequisite: Limited to people admitted to Certificate in Banking program *only*.

FIN 5406 Policies for Financial Management (5)
The process of securing and allocating funds within the business organization, with emphasis on the relevant financial decision-making and policy aspects. Prerequisite: Limited to people admitted to Certificate in Banking program *only*.

FIN 5444 Leasing and Mergers (5)
Discussion oriented course and will provide an analytical foundation to corporate development, strategies, and resource allocation decisions. Merger activity and leasing decisions will be viewed as strategic decisions by the firm to enable them to achieve corporate objectives. Prerequisite: FIN 3403, or FIN 6428, or equivalent.

FIN 5473 Small Business Finance (5)
The financial markets, financial instruments, and managerial policies and techniques available to potential and existing entrepreneurs and owner/managers. Emphasis will be upon analysis of areas of opportunity for small business; analysis of financing alternatives; and analysis of profitability. Prerequisite: FIN 3403 or FIN 6428, or equivalent.

FIN 5515 Futures Trading (5)
An examination of the risk reward structure of stock options, commodity futures and currency futures. An examination of the structure of the markets for these securities and strategies for their use in portfolio construction. Prerequisite: FIN 4502, or FIN 6516, or equivalent.

FIN 6246 Financial Markets and Institutions (5)
Analysis of the characteristics and efficiency of the money markets and capital markets. Types of money market and capital market instruments, and role of financial institutions in these markets. Prerequisite: None.

FIN 6315 Management of Deposit Institutions (5)
The objectives, constraints, and policies applicable to the management of financial institutions having primary deposit functions; commercial banks, savings and loan associations, savings banks, and credit unions. Emphasis will be upon commercial banks which constitute the core institution of the financial world. Prerequisite: FIN 6246, or equivalent.

FIN 6316 Management of Nondeposit Institutions (5)
The objectives, constraints, and policies applicable to the management of the nondeposit financial institutions; life insurance companies, property and casualty insurance companies, pension funds, investment companies, real estate investment trusts, and finance companies. Prerequisite: FIN 6246, or equivalent.

FIN 6325 Current Issues in Commercial Banking (5)
Main policy issues in commercial banking and the role of regulatory authorities. Presentation includes bank mergers and holding companies; national bank branching; and the present structure and prospects of financial sector. Prerequisite: FIN 6315, or equivalent.

FIN 6426 Financial Management Policies (5)
The selection and management of current and permanent assets to achieve corporate objectives. The selection and management of alternative sources of funds to obtain the optimal capital structure. Prerequisite: FIN 6428, or equivalent.

FIN 6436 Capital Budgeting and Long Term Resource Allocation (5)
The theory of capital allocation at the level of the firm, and empirical findings. Decision models and their application. The pattern of capital expenditure of industries and of the economy as a whole. Investment determinants. Prerequisite: FIN 6428, or equivalent.

FIN 6456 Quantitative Methods in Financial Analysis (5)
The applications of computer techniques to financial management of manufacturing firms and financial institutions. Prerequisite: FIN 6428, or equivalent.

FIN 6516 Securities Analysis (5)
An analysis of contemporary securities markets and their operations. The determinants of the risk reward structure of equity and debt securities. Prerequisite: None.

FIN 6525 Portfolio Management (5)
Financial theories will be applied to the construction of portfolios. Portfolio management techniques will be analyzed in regard to the goals of individuals, corporations, and various financial institutions. Prerequisite: FIN 6516, or equivalent.

FIN 6625 International Bank Management (5)
Growth of U.S. international banking and description of international banking services. Examination of lending practices, types of risk and formulation of international banking policy. Prerequisite: None.

FIN 6636 International Finance (5)
A comparative study of the institutional characteristics and internal efficiency of developed and underdeveloped capital markets. The relationships between world and capital markets and prospects for integration. The role of multilateral institutions, multinational corporations, states, and the structure of trade, in the international short and long term capital flows. The development of financial centers. Prerequisites: FIN 6428, or equivalent.

FIN 6716 Financial Management of Governmental Organizations (5)
The budgetary process of identifying, justifying, and allocating funds. The securing of funds in the market and the efficient allocation of funds. Prerequisite: None.

FIN 6806 The Theory of Finance (5)
The study of the development of the theory of finance and its implications for the financial decisions made by the managers of business firms. Topics include: utility theory; capital budgeting; portfolio theory; capital market equilibrium; multi-period valuation; and the cost of capital. Financial decision making is explored under both certainty and uncertainty and within the context of both perfect and imperfect markets. Prerequisite: FIN 6428, or equivalent.

FIN 6906 Independent Study in Finance (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

FIN 6915 Master's Project in Finance (1–10)
An individualized research project and report, which may include field experience with a firm or agency; library research; computer programming; or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program. Consent of faculty tutor and Department Chairperson required.

FIN 6936 Special Topics in Finance (1–5)
For groups of students who desire intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

Insurance

INSURANCE

Definition of Prefix

RMI—Risk Management & Insurance

RMI 4015 Principles of Insurance (5)
Types of risk; methods of handling risk; analysis of insurance as a principal method; organization and operation of insurance companies; bases for decision-making in management of personal and business risks.

RMI 4016 Management of Insurance Enterprise (5)
Analysis of the operations of insurance organizations, underwriting; rate making; regulation; legal organization; management and control financial analysis; marketing systems. Prerequisites: RMI 4015 and consent of Instructor.

RMI 4115 Life Insurance (5)
Functions and uses of life insurance; types of policy contracts; calculation of premiums and reserves; investments; legal principles; organization, management, and supervision of companies.

RMI 4117 Personal Insurance Planning (5)
Planning a personal program of insurance; integrating life, health and accident, property, pensions, and governmental programs.

RMI 4135 Employee Fringe Benefit Programs (5)
Coverage of executive compensation; contractual agreements; benefit formulas; financing of death, disability, and retirement benefits; group life and health insurance; pension and profit sharing plans; taxation and legal aspects underlying pensions; deferred and non-deferred considerations.

RMI 4145 Business and Estate Insurance Planning (5)
Applications of life and health insurance to business and estate planning situations, emphasis on current practices and developments in retirement planning, business continuation, and estate conversions.

RMI 4212 Property Insurance I (5)
Basic principles of fire and allied lines insurance, including standard fire insurance contracts, declarations, agreements, conditions and exclusions; fire insurance forms, clauses, and endorsements; special and allied fire lines; marine and other insurance.

RMI 4213 Property Insurance II (5)
Multiple-line risk and risk management; the multiple-line insurance industry; property and liability hazards and policy contracts; functional aspects of underwriting, rate making, and claims handling.

RMI 4220 Casualty Insurance I (5)
A broad concept of casualty insurance, including a thorough review of basic policies; dailies; underwriting; losses; multiple line and comprehensive forms. Subjects covered include property and personal liability insurance; boiler and machinery insurance; air insurance; inland and ocean marine insurance; workmen's compensation; and surety.

RMI 4221 Casualty Insurance II (5)
A continuation of RMI 4220, but including agency management and company administration.

RMI 4305 Risk Management (5)
Concepts and philosophies of risk management. Application of alternatives to handling risks, including risk retention; loss prevention; corporate insurance programs; self-insurance; insurance surveys and case studies.

RMI 4405 Insurance Law (5)
Legal environment and essentials of the law particularly applicable to the business of insurance. Emphasis on statutory regulation in Florida.

RMI 4500 Social Insurance (5)
Introductory analysis of the rationale for social insurance; structure of current social insurance programs; evaluation of programs; old-age, survivors, health, disability, and unemployment insurance.

RMI 4740 Insurance Underwriting and Rating
Examination of an underwriter's and rater's functions: selection of risks, classification and rating, retention and reinsurance deductions and exclusions, etc. Prerequisite: INS 405, or consent of Instructor.

RMI 4910 Independent Study in Insurance (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

RMI 4935 Special Topics in Insurance (1–10)
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

RMI 6055 Graduate Survey of Insurance (5)
Graduate examination of current problems in insurance, including theory; uses of insurance in business organizations; property and liability insurance; health insurance; and life insurance.

RMI 6912 Independent Study in Insurance (1–10)
Individual conferences, supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

RMI 6936 Special Topics in Insurance (1–10)
Intensive study for groups of students of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MANAGEMENT

Definition of Prefixes

MAN—Management; QMB—Quantitative Methods in Business.

MAN 3949 Cooperative Education—Management I (1–5)
A special program enabling management majors to work in jobs significantly related to their major area and career goals. Specific placement must be approved by the Department Chairperson and faculty advisor prior to enrollment. Prerequisite: qualification for Cooperative Education Program.

MAN 4064 Dilemmas of Responsibility in Business Management (5)
The use of interdisciplinary concepts and tools to define and understand the moral and ethical dilemmas involved in business and corporate spheres of activity. Specifically attended to are issues such as pollution, consumer affairs, and quality of public facilities.

MAN 4120 Intergroup Relations in Organization (5)
A study of the psychological and sociological dimensions of intergroup relations. Attention to the problems experienced by subgroups in large and small organizations, with particular reference to ethnic, racial, and subcultural groups. The roles and responsibilities of management in the constructive resolution and utilization of inter-group conflict in organizations.

MAN 4151 Behavioral Science in Management (5)
An analysis of selected concepts in behavioral science, their interaction and application to management. Topics include perception, motivation, and group behavior.

MAN 4201 Organization Theory (5)
A comparative analysis of various theories of organization, (including the classical, biological, economic, and Cyert-March models) and of their treatment of fundamental structure; conflict, communications; group and individual behavior; and decision-making. Primary emphasis on developing an integrated philosophy of organization and management. Prerequisite: MAN 3010, or equivalent.

(Continued)

Management

MAN 4301 Personnel Management (5)
Attention is focused on the theory and practice of modern personnel management as related to other management functions. Topics include: selection; training; job and performance evaluation; and incentive schemes. Special attention is given to human resource management and development at various organizational levels.

MAN 4320 Personnel Recruitment and Selection (5)
In depth study of the personnel staffing function. Includes an analysis of objectives, techniques, and procedures for forecasting manpower needs, recruiting candidates, and selecting employees.

MAN 4322 Personnel Information Systems (5)
A survey of personnel reporting requirements; assessment of information needs; manpower planning; and development of integrated personnel systems. Prerequisites: CIS 3000 and MAN 4301.

MAN 4330 Wage and Salary Administration (5)
Presents the theories and techniques used by management in the areas of work measurement, wage incentives and job evaluation.

MAN 4401 Industrial Relations (5)
Organizational and economic analysis of the problems and issues arising out of legislative and judicial efforts to define the rights, duties and responsibilities of labor organizations and management in the field of labor relations.

MAN 4410 Labor, Management, and Collective Bargaining (5)
The various options for settlement of labor-management disputes. Evaluation of the nature, institutions and processes of collective bargaining; the analysis of labor-management issues and their significance; and the character and procedures of arbitration, mediation, fact-finding, and conciliation. The course deals also with the analysis of the labor market.

MAN 4521 Operations Planning and Control (5)
Concepts in design, analysis, and control of operating systems, plant layout and design, materials handling, quality control, forecasting, and decision theory applied to production and service systems. Prerequisites: MAN 3503, QMB 3150.

MAN 4523 Production Information Systems (5)
A study of the special problems associated with the development of information systems capable of supporting the production function of an organization. Review of information systems approaches to inventory control and work processing management.

MAN 4600 International Management (5)
Introductory survey of management issues that confront the multinational enterprise. At least one class session is devoted to each of the following topics; review of basic trade theory; tariffs and trade barriers; organizational transfer, foreign exchange; institutions affecting the multinational manager (such as IMF, IDB, Ex-in Bank, EEC, IBRD), international financial management issues in multinational accounting; personnel management, comparative business customs and behavioral issues; export-import procedures; conflicts with national interests.

MAN 4610 International and Comparative Industrial Relations (5)
Examines selected industrial relations systems of Western Europe, Asia and the Americas, with special emphasis on differences among systems and the reasons such differences exist. The industrial relations significance of the multinational enterprise, and management problems associated with operations in diverse systems, are analyzed.

MAN 4711 Social Responsibility and Social Accounting (5)
The sources of the conception of corporate social responsibility. An examination of the classical doctrines as well as new approaches to the conception of the corporation as a citizen. A portion of the course will be devoted to a discussion of social accountability and social accounting as a specific problem in corporate input. Prerequisite: MAN 3712, consent of Instructor.

MAN 4731 Modern Business History (5)
An examination of the history of the corporation in the United States since the Civil War, up to, and including, the development of the multinational corporation. An examination of the social and economic forces operative in the development of the corporate form. A full exploration of the current power of the corporate form—and legal, and other, efforts to limit this power. Prerequisite: MAN 3712, or consent of the Instructor.

MAN 4734 Social Science of Business (5)
Sociological, anthropological, and psychological studies of corporate management and the effect of corporate behavior. Emphasis will be on existing data and on the development of research-oriented proposals intended to develop new insights into the application of social science techniques to the problems of business as an institution and as part of society. Prerequisite: MAN 3712, or consent of Instructor.

MAN 4741 Business Environment and Policy Formation (5)
A course studying the conceptual and environmental forces which establish the framework of business strategy and tactical decision. A critical analysis of conceptual processes which can limit the executive's capacity to respond to change in the total and in the business environment. Prerequisite: MAN 3712, or consent of Instructor.

MAN 4742 Business and the Environment (5)
A course on the effect of industrialization and technological change on the physical environment. An examination of the current legal, economic and political consequences of pollution and environmental damage, and the abatement of these factors. Prerequisite: MAN 3712, or consent of Instructor.

MAN 4781 Women in Management of Business Organizations (5)
This course is intended for students interested in the present and future status of female managers. It will focus on the history of women in professions; the socio-economic status of women in business; educational factors, sex roles and the informal organization; relevant legal requirements; the development of managerial climates for effective performance; and strategies for changing organizations.

MAN 4802 Small Business Management (5)
The organization and operation of the small business: accounting, finance, production and marketing subsystems. The use of analytical approach. Problems of manpower management and information flow. Possible use of EDP, case studies.

MAN 4810 Management Science (5)
Survey of management science operations research from an applied point of view. Emphasis on the formulation of models of business problems such as allocations; inventories; project management; replacement; transportation; scheduling sequencing; queuing theory; and competition. Prerequisite: QMB 3150, or equivalent.

MAN 4820 Stystems Analysis and Design (5)
Topics include: information systems concepts; the structure, design, and development of the data base; and techniques and procedures used in the analysis and design of systems projects. Prerequisite: CIS 3000.

MAN 4821 Information Systems Development (5)
Advanced topics in the analysis and design of computer-based management information systems. Includes feasibility studies; systems analysis; design; implementation; operation; and the interfacing of a computer-based system within the organization. Cases and field studies will be used as a basis for course projects.

(Continued)

Management

MAN 4822 Systems Management (5)
An in-depth, case-oriented study of the problems encountered in the management of systems projects. Analyst-user conflicts, communication problems within the systems department, computer evaluation and selection techniques, computer negotiations and contracts, and project management are covered in detail. Where appropriate, field study investigating a topical area will be carried out by each student.

MAN 4905 Independent Study in Management (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required. CR/NC only.

MAN 4930 Special Topics in Management (1–10)
For students who wish an intensive study of a particular topic or a limited number of topics not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required. Grading option.

MAN 4949 Cooperative Education—Management II (1–5)
Continuation of MAN 3949. Prerequisites: MAN 3949, and qualification for Cooperative Education Program.

MAN 5123 Human Interaction I: Personal Growth Laboratory (5)
Experience designed to increase awareness of personal social impact, and sensitivity to the feelings of others; to improve interpersonal communication, and increase understanding of the change-learning process. Study and analysis of class-group participation as well as other functional social groups.

MAN 5415 Public Sector Collective Bargaining (5)
Examination of the labor force: labor markets; public manpower policy; and organizational manpower planning. Discussion of recent developments in public and organizational policy.

MAN 5830 Planning for Information Systems (5)
An in-depth study of systems concepts as they apply to information systems in organizations. Consideration of planning for an accomplishment of systems development through the phases of the life cycle and the overall management of the information systems function. Enrollment limited to students in the MIS Certificate Program.

MAN 5831 Analysis of Information Requirements (5)
An in-depth study of the problems of determining effective information needs for systems users. Consideration of the development of data element dictionary capability; procedures for eliciting requirement and report content. Enrollment limited to students in the MIS Certificate Program.

MAN 5832 Design of Information Systems (5)
An in-depth study of the problem of determining an efficient information system design to meet the requirements specified by the user. Consideration of the determination of alternative designs, selection of the "best" design, and conversion of the design into programming specifications. Enrollment limited to students in the MIS Certificate Program.

MAN 5930 Seminar in Personnel Management (5)
Overview and examination of the various aspects of the personnel management function. Course is only open to students enrolled in the Personnel Management Certificate Program.

MAN 6112 Group Processes in Organizations (5)
The social and psychological processes of organizational functioning. The roles played by small groups in organizational settings.

MAN 6121 Interpersonal Behavior and Analysis (5)
A human interaction-human relations training laboratory, designed to increase both self-awareness and understanding of behavior dynamics in groups. Course is intended to enable students to broaden their conceptual understanding of human interpersonal communications and conflict.

MAN 6124 Human Interaction II Organizational Consultation (5)
Theories and approaches to organization development and change, with a particular focus on public schools and organizations. Supervised laboratory on systematic consultation and action skills, including schools and organizations. Supervised laboratory on systematic consultation and action skills, including method of assessment (survey feedback, milling, confrontation meetings, systems analysis); agenda-setting; feedbacks; coaching; third-party consultation for conflict management; and team training. Prerequisite: MAN 5123.

MAN 6213 Conflict in Organizations (5)
A critical examination of the role and impact of interpersonal and intergroup conflict in organizations. Models are approaches to utilizing and resolving conflict toward constructive personal and organization ends will be emphasized.

MAN 6311 Advanced Personnel Management (5)
Attention is focused on the theory and practice of modern personnel management, as related to other management functions. Topics include selection; training; job and performance evaluation; and incentive schemes. Special attention is given to human resources management and development at various organizational levels.

MAN 6321 Personnel Selection and Placement (5)
Individual differences and their measurement in personnel selection and job placement. Job design and redesign. The learning process. Counseling and career guidance.

MAN 6331 Compensation Administration (5)
An in depth analysis of wages and salary administration, including such topics as job evaluation; wage incentive systems; and work sampling.

MAN 6351 Personnel Training and Development (5)
Determining training needs. Training methods. The training staff. Supervisor development. Equal Employment Opportunity management.

MAN 6403 Government and Industrial Relations (5)
Survey of industrial relations law, with special emphasis on the current status of union-management relations law. Covers the scope and content of current legislation; selected topics in applied labor relations law; and the role of government.

MAN 6405 Labor Relations (5)
Examines the collective bargaining system in the United States from the viewpoint of the practitioner. Various aspects of the environment, structure, processes, issues and impact of collective bargaining are considered. Special attention is given to the negotiation and administration of agreements.

MAN 6411 Collective Bargaining Topics (5)
An advanced course in labor relations, for students will some background who desire more depth than that provided in introductory courses. Topics of contemporary interest, such as public sector collective negotiations, are treated at length.

MAN 6529 Seminar in Production Control Systems (5)
The design of control systems for production operations automation, and its impact on organizations. Integrated operational–simulation approach. Group and individual projects.

MAN 6601 International Management (5)
Graduate seminar focusing on management issues confronting the multinational enterprise. Includes basic trade theory; tariffs and trade barriers; organizational transfer, foreign exchange; international financial management; export-import procedures; comparative busi-

Marketing

ness customs; personnel management; and institutions affecting the multinational manager.

MAN 6603 Problems in Comparative Management (5)
Discussion of literature, readings, and cases, aimed at underscoring the differences and similarities in management behavior in different countries and cultures. General instruction in obtaining and utilizing comparative data on management differences.

MAN 6604 Comparative Management Analysis (5)
Development and testing of hypotheses concerning differences and similarities in managerial behavior in different countries and cultures; discussion of implications; case analyses.

MAN 6715 Politics in Organizations (5)
The objective of this course is to give the student experience in an executive role in a contemporary organization. The stress is on human interaction; decision-making under pressure; and organizational politics.

MAN 6819 Survey of Management Science (5)
An introductory course that will examine model building, and the methodology, techniques and tools of management science. A survey of available analytic models will be included.

MAN 6833 Information Systems Planning (5)
An in-depth study of systems concepts, as they apply to information systems in organizations. Consideration of planning for systems development and its accomplishment through the phases of the life cycle, and of the overall management of the information systems function.

MAN 6834 Information Requirements Analysis (5)
An in depth study of the problem of determining effective information needs for systems users. Consideration of the development of data element dictionary capability; procedures for eliciting requirements; and techniques for documenting requirements and report content.

MAN 6835 Information Systems Design (5)
An in depth study of the problem of determining an efficient design to meet the requirements specified by the user. Consideration of the determination of alternative designs, selection of the "best" design, and conversion of the design into programming specifications.

MAN 6836 Systems Analysis (5)
A study of the systems approach to problem solving as it applies to any area of specialization. Consideration of the problems in determining system objectives; identifying system boundaries and constraints; marshalling resources for achieving system objectives; analyzing the subcomponents of the system and their respective objectives; and managing the system.

MAN 6895 Seminar in Management Science (5)
New topics and new application areas will be explored. Lectures will relate to the latest advances in the theory and application of management science.

MAN 6905 Independent Study in Management (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty sponsor and Department Chairman required. CR/NC only.

MAN 6910 Research Methods in Management (5)
Covers the research methods and analytical techniques most widely used in research in human resources and general management. Emphasis is on helping students to become more aware of current techniques and their applications.

MAN 6930 Master's Seminar in Management (1–5)
An examination of recent research findings in selected areas of current concern. Emphasis is placed on readings; active discussion; and small, short-term action and research projects. The student may make a preliminary selection of his/her master's thesis or project topic.

MAN 6974 Master's Project in Management (1–10)
Each student is required to develop and conduct an individual research project or thesis on a topic of interest. The topic will be chosen in consultation with a faculty member in the School.

QMB 4680 Simulation of Management Systems (5)
Exploration of basic concepts in computer simulation of systems. Application of these concepts to a variety of managerial problems. Discussion of waiting line models; continuous simulation models; heuristic methods; and management games. Presentation of several computer programs and languages for simulation. Exposure to the operation and analysis of some simulation models. Prerequisites: QMB 3150, CIS 3000.

QMB 4700 Principles of Operations Research I (5)
Application of deterministic operations research models (such as linear and nonlinear programming, networks (CPM), dynamic programming, and branch and bound techniques) to managerial problems of allocation; planning and scheduling investment; control prescheduling. Prerequisite: MAN 4720.

QMB 6805 Deterministic Models for Management Analysis (5)
Applications of deterministic models (such as linear and nonlinear programming, network analysis (PERT), dynamic programming, and branch and bound algorithms) to managerial problems of allocation, planning, scheduling, investment, and control.

QMB 6845 Simulation of Management Systems (5)
Basic concepts of computer simulation of systems; application of these concepts to a variety of managerial problems. Industrial dynamics, urban dynamics, and large system simulation. Simulation in economic analysis. Heuristic methods. Management games.

QMB 6855 Stochastic Models for Management Analysis (5)
Applications of probabilistic models (such as queuing, inventory, and renewal) to their managerial problems.

QMB 6875 Stochastic Models for Project Management (5)
Review of deterministic models and principles. Introduction to GERT, critical path methods, criticality index, and resource considerations in stochastic networks. Emphasis on operational decision-making, advanced topics, and individual projects. Students use the computer, and existing programs, to analyze/simulate hypothetical project networks, and learn to interpret the results in order to facilitate operational decisions.

MARKETING

Definition of Prefixes
MAR–Marketing.

MAR 4054 Marketing for Non-Profit Organizations (5)
Marketing techniques as applied to non-profit organizations, including (but not limited to) the marketing of such governmental programs as housing, educational, health services, transportation, and Social Security.

MAR 4103 Personal Selling (5)
The development of effective salesmen/customer relationships is emphasized. Selection, training, and motivation of the sales force, and the relationship between personal selling and the other elements of marketing strategy are analyzed.

MAR 4153 Retailing Management (5)
An examination of the role of retailing in the marketing system. Attention is concentrated on fundamentals for successful retail management. The course emphasizes basic marketing principles and procedures, including merchandising; markup-markdown; pricing; stock-turn; and sales and stock planning.

Marketing

MAR 4154 Cases in Retailing Management (5)
This course treats the retail marketing concentration in terms of up-to-date merchandise management methods. Emphasis is on elements of profit, open-to-buy planning, return on investment, and inventory control. The course delineates the decisions made by retailing managements and reviews their available strategies. Prerequisite: MAR 4153, or consent of Instructor.

MAR 4203 Marketing Channels (5)
The course focuses upon institutions, functions, and flows within channels of distribution; and their integration into channels systems. Wholesaling and physical activity are emphasized. Same course as TRA 4203.

MAR 4213 Transportation Logistics (5)
(Same course as TRA 4012). Consideration of transportation logistics and its relationship to production and distribution. Study of the characteristics, management, legislation, and public regulation of various modes of transportation.

MAR 4243 International Marketing (5)
The course studies the information required by marketing managers to assist in satisfying the needs of consumers internationally. Special emphasis will be given to the constraints of the international environment.

MAR 4244 Export Marketing (5)
This course emphasizes practical approaches to export marketing, including marketing strategies by individual firms to serve foreign markets. Operational methods of identifying, establishing, and consolidating export markets are discussed, with particular attention to the needs of the smaller business.

MAR 4303 Advertising Management (5)
The study of advertising in business and society, providing a broad understanding of advertising's social, communicative, and economic purposes. An examination of the types and functions of advertising. Discussion of research, media selection, budget determination, and other elements in the total advertising process.

MAR 4343 Promotional Strategy (5)
The course deals with problems of decision-making in the areas of marketing communication methods, with primary emphasis on advertising.

MAR 4344 Advertising Campaign Management (5)
Strategic approaches to managing advertising campaigns, including selection of approaches; market research; consumer target markets; media; advertisements; development and control of budgets. Prerequisite: MAR 4303, or consent of Instructor.

MAR 4503 Consumer Behavior (5)
The course offers an introduction to the analysis of the consumer, as the basis for the development of the marketing mix.

MAR 4613 Marketing Research (5)
An examination of the marketing research process and its role in aiding decision-making. Emphasis is placed on evaluation and utilization of research information in making marketing decisions.

MAR 4663 Packaging for Consumer and Industrial Markets (5)
A general course in packaging dealing with techniques, motivational influences, technology, and functional development of the package in both consumer and industrial market places. Consideration will be given to the basic functions of the package and their relation to the needs and wants of society.

MAR 4703 Current Issues in Marketing I (5)
Intensive study of various topic areas in marketing. Course emphasizes student reading and research, with oral and written reports. Students electing to take this seminar may take no more than 5 credit hours of independent study in marketing.

MAR 4704 Current Issues in Marketing II (5)
Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 4703.

MAR 4713 Cases in Marketing Management (5)
An analytic approach to the performance to marketing management. The elements of marketing mix as the focus of decision-making in marketing are studied, and the case method of instruction is employed.

MAR 4723 Marketing of Small Business Enterprises (5)
Designed to develop an understanding of the principles and practices which contribute to the successful marketing operation of a small business enterprise, this course deals with marketing policies, techniques, and applications, to aid the entrepreneur in this field.

MAR 4733 Marketing and the Law (5)
A policy and operational analysis of legislative acts and judicial interpretations of laws influencing organizations engaged in marketing activities.

MAR 4753 Marketing Game Competition (5)
Focal point of the course is a computerized marketing management simulation. The course provides an opportunity for the student to participate, as a member of the marketing management team of a firm in competition with other firms.

MAR 4773 Real Estate Marketing (5)
(Same course as REE 4800). The course focuses on applications of marketing concepts and tools within the real estate industry.

MAR 4907 Independent Study in Marketing (1–10)
Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

MAR 4933 Special Topics in Marketing (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MAR 4941 Marketing Internship (1–10)
Full-time supervised work in a selected organization. Prerequisites: At least twenty hours in marketing; consent of Instructor and Department Chairperson.

MAR 4949 Cooperative Education in Marketing (5)
Open to marketing majors who have been admitted to the Cooperative Education Program, with consent of Chairperson. Full time supervised work with a participating organization in marketing. Report to the organization and a paper to the Chairperson are required.

MAR 5913 Independent Study in Marketing (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

MAR 5935 Special Topics in Marketing (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MAR 6246 Advanced International Marketing (5)
This course discusses the nature and scope of international marketing, and explores multinational problems facing firms and other international marketing organizations, together with strategies for foreign market penetration.

Real Estate

MAR 6346 Advanced Promotional Strategy (5)
The course focuses on planning, problem-solving, and decision-making, as they apply to promotion programs. Primary emphasis is on advertising, with discussion of the role of promotion in relation to other elements of the marketing program.

MAR 6506 Advanced Consumer Behavior (5)
Modern comprehensive models of consumer behavior are utilized as a framework for understanding consumer decision processes.

MAR 6606 Quantitative Methods in Marketing (5)
A study of the quantitative reasoning process and its usefulness for marketing decision-making. Each of the major decision areas in marketing is examined, using existing quantitative models as aids to understanding marketing processes.

MAR 6617 Advanced Marketing Research (5)
The role of research in providing information for marketing decision-making, including an examination of the research process and the tools available to the researcher.

MAR 6706 Current Issues in Marketing I (5)
Intensive study of various topic areas in marketing. Course emphasizes student reading and research, with oral and written reports. Students electing to take this seminar may take no more than 5 credit hours of independent study in marketing.

MAR 6707 Current Issues in Marketing II (5)
Students electing to take this seminar may not take independent study in marketing. Prerequisite: MAR 6706.

MAR 6717 Advanced Marketing Management (5)
Course emphasis is on application and integration of concepts and tools, through participation in the marketing management of a firm in competition with other firms. The course's focal point is a computerized marketing management simulation.

MAR 6915 Independent Study in Marketing (1–10)
Individual conferences; supervised reading; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

MAR 6936 Special Topics in Marketing (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MAR 6971 Master's Project (5)
An individualized research project and report, which may include field experience with a firm or agency, library research, computer programming, or project development. Permission of the faculty advisor is required before registering for the course. The course should be taken during the last half of the student's graduate program.

REAL ESTATE

Definition of Prefix
REE–Real Estate.

REE 4040 Introduction to Real Estate (5)
Decision making processes for development, financing, marketing, and management of real estate space. Economics of regional development and urbanization. Public policy issues concerning urban environment and the real estate business. Prerequisite to all other courses in real estate and regional development.

REE 4121 Real Estate Management (5)
Theories and techniques of professional management of real estate including such topics as creating a management plan; merchandising space; economics of alternates; market analysis; the maintenance process; owner-tenant-manager relations; operating budgets; tax consideration; ethics. Prerequisite: REE 3040, or permission of Instructor.

REE 4200 Real Estate Finance (5)
Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction financing and permanent financing of residential and income producing property. Prerequisite: REE 3040, or permission of Instructor.

REE 4221 Valuation of Real Estate (5)
Valuation and appraisal framework applied to residential and income producing property; role of computers; valuation theory and process as a guide to business decisions. Prerequisite: REE 3040, or permission of Instructor.

REE 4301 Real Estate Investment (5)
Fundamentals of acquisition, ownership, and disposition of investment property; taxation and tax shelter; cash flow projections; analysis of specific types of investment property; utilization of computers as a decision-making tool. Prerequisite: REE 3040, or permission of Instructor.

REE 4430 Legal Environment of Real Estate (5)
Legal environment of real property ownership, transfer and brokerage; estates in land; sales contracts; mortgage transactions; titles; conveyances, landlord and tenant; restrictions and zoning; eminent domain. Prerequisite: REE 3040, or permission of Instructor.

REE 4710 Regional Development (5)
Measurement and forecasting of economic activity in an urban/regional context; factors influencing economic growth and land allocation. Prerequisite: REE 3040, or permission of Instructor.

REE 4730 Urban Land Acquisition and Development (5)
Real estate development: acquisition of raw land; zoning; subdivision into sites; provision of utilities and services; financing; merchandising of improved sites. Emphasis on design and development of residential communities. Prerequisite: REE 3040, or permission of Instructor.

REE 4731 Urban Land Planning and Use (5)
Theories of city growth and structure, operations of the real estate market in land allocation; application of above concepts to current practices in city and regional planning. Prerequisite: REE 3040, or permission of Instructor.

REE 4750 Real Estate and Regional Development Policy (5)
A capstone course in integrating all the aspects of real estate and regional development learned in previous courses, projects, cases, and field trips. To be taken in the student's senior year. Prerequisite: Permission of Instructor.

REE 4800 Real Estate Marketing (5)
Organization and operation of a real estate brokerage office, including selection, training and financing of sales personnel; obtaining and controlling listings; process and methods involved in the selling of real estate; promotion activities, including advertising and public relations; growth problems; professionalism; ethics. Prerequisite: REE 3040, or permission of Instructor.

REE 4905 Independent Study in Real Estate (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

REE 4930 Special Topics in Real Estate (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

REE 6020 Industrial Real Estate I (5)
General overview of industrial real estate, focusing on types of activities; locational requirements; financing techniques; brokerage; government influence; current trends; technological change; characteristics of industrial buildings.

Real Estate

REE 6021 Industrial Real Estate II (5)
Introduction to investment and valuation problems in industrial real estate. Topics include; taxation and investment analysis; discounted cash flow techniques; appraisal framework applied to income properties. A computer will be utilized in approaching the above problems.

REE 6107 Advanced Real Estate Valuation (5)
This course concentrates on the valuation of real estate and stresses market, cost, and income approaches to valuation, as well as underlying theory and practice. Instruction will be provided in residential appraisal and the principles of income forecasting, capitalization and mortgage-equity analysis of real estate investments.

REE 6111 Income Property Appraisal (5)
Valuation and appraisal framework applied to income properties; capitalization; rates and techniques; discounting and compound interest; mortgage-equity analysis. Includes Ellwood analysis; the role of computers; valuation as a guide to business decisions.

REE 6121 Real Estate Management (5)
Theories and techniques of professional management of real estate, including such topics as creating a management plan; merchandising space; economics of alternates; market analysis; the maintenance process; owner-tenant-manager relations; operating budgets; tax considerations; ethics. Prerequisite: REE 3040, or permission of Instructor.

REE 6195 Seminar in Real Estate Valuation Theory & Practice (5)
A study of the process of property valuation, utilizing cost, market and income approaches. The role of computers and mass appraisal techniques will also be examined. Prerequisite: Graduate standing and permission of Instructor.

REE 6200 Real Estate Finance (5)
Financial analysis and structuring of real estate projects; traditional and creative concepts and mechanisms for construction financing and permanent financing of residential and income-producing property. Prerequisite: REE 3040, or permission of Instructor.

REE 6207 Advanced Real Estate Finance (5)
This course examines the various methods of financing real estate from the points of view of lenders, developers and owners, as well as the institutional structure within which they operate. Cases will be used to study decision processes for negotiating terms and conditions of these parties.

REE 6221 Valuation of Real Estate (5)
Valuation and appraisal framework applied to residential and income-producing property; role of computers; valuation theory and process as a guide to business decisions. Prerequisite: REE 3040, or permission of Instructor.

REE 6295 Seminar in Real Estate Finance (5)
A study of financial institutions, their methods; and inter-regional flows of funds in mortgage markets. Further emphasis is placed on national economic policies affecting mortgage markets. Prerequisite: Graduate standing and permission of Instructor.

REE 6301 Real Estate Investment (5)
Fundamentals of acquisition, ownership and disposition of investment property; taxation and tax shelter; cash flow projections; analysis of specific types of investment property; utilization of computers as a decision-making tool. Prerequisite: REE 3040, or permission of Instructor.

REE 6305 Advanced Real Estate Investment Valuation (5)
The course emphasizes measuring risk and rate of return under conditions of uncertainty in real estate investment decision-making. Simulation is used to face the problems of matching investment strategy to the physical property, leverage, income taxation, and organizational alternatives.

REE 6395 Seminar in Real Estate Investment and Taxation (5)
The techniques of real estate investment analysis, utilizing present value and cash flow approaches. The impact of Federal taxation on real estate investment decision. Prerequisite: Graduate standing and permission of Instructor.

REE 6710 Regional Development (5)
Measurement and forecasting of economic activity in an urban/regional context; factors influencing economic growth and land allocation. Prerequisite: REE 3040, or permission of Instructor.

REE 6715 Regional Planning and Development (5)
Methods of measuring and forecasting economic activity, and issues in allocating urban land. Techniques for analysis of government policies affecting urban growth and development. Prerequisite: Graduate standing and permission of Instructor.

REE 6730 Urban Land Acquisition and Development (5)
Real estate development: acquisition of raw land; zoning; subdivision in sites; provision of utilities and services; financing; merchandising of improved sites. Emphasis on design and development of residential communities. Prerequisite: REE 3040, or permission of Instructor.

REE 6750 Real Estate and Regional Development Policy (5)
A capstone course in integrating all the aspects of real estate and regional development learned in previous courses, projects, cases, and field trips. To be taken in the student's senior year. Prerequisite: permission of Instructor.

REE 6795 Seminar in Urban Housing Policy & Problems (5)
Examination of national housing policies and their formulation; the role of the public and private sectors in regard to housing problems; effectiveness of various housing policies. Prerequisite: RES 6715, and permission of Instructor.

REE 6800 Real Estate Marketing (5)
Organization and operation of a real estate brokerage office, including selection, training and financing of sales personnel; obtaining and controlling listings; process and methods involved in the selling of real estate; promotion activities, including advertising and public relations; growth problems; professionalism; ethics. Prerequisite: REE 3040, or permission of Instructor.

REE 6820 Industrial Brokerage (5)
Defines distinction between industrial brokerage and general real estate brokerage; role and functions of the industrial broker; industrial brokerage practice. Includes negotiating and leasing; regulations and ethics.

REE 6906 Independent Study of Real Estate (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

REE 6932 Special Topics in Real Estate (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

REE 6935 Seminar in International Real Estate (5)
Current trends and issues affecting industrial real estate on an international level. Topics include: the multinational corporation and its location decisions; foreign taxation; international trade and exchange rates.

REE 6946 Industry Project (5)
Advanced individual or group study of specialized problems in the real estate field. Guidance of study to be provided by real estate faculty. Prerequisite: Permission of advisor.

Transportation Management
Master of Business Administration

TRANSPORTATION MANAGEMENT
Definition of Prefix
TRA–Transportation.

TRA 4012 Transportation Logistics (5)
Consideration of transportation logistics and its relationship to production and distribution. Discussion of characteristics, management, legislation, and public regulation of various modes of transportation.

TRA 4101 Transportation Rate Making (5)
Description and analysis of rate making, for both passenger and cargo, in the various modes of transportation–including trucks, railroad, airlines, and ocean transportation. Classes may concentrate on one particular mode for practical applications.

TRA 4203 Physical Distribution Management (5)
Distribution in overall company operations; organization of the traffic function; determination of classification and rates; integration of transportation with production flow, inventory management, warehousing, marketing policies, and plant location.

TRA 4240 Transportation Systems and Services (5)
Survey and analysis of transportation modes, including rail, motor, air, water, pipeline, and mass transit, and their impact on the social and economic systems; discussion of current problems.

TRA 4320 Transportation Regulation (5)
Study of the economic and constitutional basis of transport regulation; the scope of regulation. Discussion of the regulation of industrial traffic and transport modes; the structure and policies of federal and state regulatory agencies.

TRA 4380 Transportation Policy (5)
Consideration of national transportation policy; the principal policy issues currently facing the transportation modes.

TRA 4410 Air Transportation (5)
A comprehensive introduction to the total air transportation environment including general economic characteristics of basic areas; commercial, private, corporate, and airline categories; government promotion and regulation of the industry, including aircraft manufacturing and operation; air traffic control; and airport support and functions.

TRA 4411 Airport Management (5)
Application of management principles to airport operation, with emphasis on unique characteristics of airport finance; government relations and regulations; airline relations and interdependence.

TRA 4412 Aircarrier Management (5)
An introduction to the broad scope of airline management practices and policies. Particular emphasis on problem analysis in financing, marketing, scheduling, fleet planning, facilities planning, maintenance, and general operations.

TRA 4510 Mass Transportation and Urban Problems (5)
Urban and metropolitan transportation development; requirements, benefits and costs of alternative approaches to mass transit; management techniques and operating principles; policy and regulation.

TRA 4906 Independent Study in Transportation (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

TRA 4936 Special Topics in Transportation (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

TRA 4941 Transportation Internship (1–10)
Full time supervised work in a selected organization. Prerequisite: At least twenty hours in transportation; consent of instructor and Department Chairperson required.

TRA 5245 Transportation Logistics (5)
Quantitative methods applied to solving problems in business logistics; mathematical and statistical models; optionization theory and simulation. Problems selected from areas of physical distribution management, inventory control, mode selection, and facility locations.

TRA 5401 Transportation Operations and Carrier Management (5)
Contemporary management techniques as applied to carriers; management problems peculiar to transportation firms; economic analysis of marketing problems; capital formation; costs; pricing; labor relations; and government regulation.

TRA 5601 Public Utility Principles (5)
An analytical and descriptive survey course, treating the historical development of public utilities. The economics, legal environment, and organization of public utilities are discussed and analyzed. Regulation theory as it applies to electric, gas, water, and communications industries is covered.

TRA 6035 Graduate Survey of Transportation Management (5)
Graduate survey of transportation, its elements, and their impact on society. History, economics, and regulatory principles in transportation. Current policies and problems for all the major transportation modes.

TRA 6905 Independent Study in Transportation (1–10)
Individual conferences; supervised readings; reports on personal investigations. Consent of faculty tutor and Department Chairperson required.

TRA 6936 Special Topics in Transportation (1–10)
For groups of students desiring intensive study of a particular topic or a limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor and Department Chairperson required.

MASTER OF BUSINESS ADMINISTRATION PROGRAM
Definition of Prefixes
ACC–Accounting; ECP–Economic Problems & Policy; FIN–Finance; MAN–Management; MAR–Marketing; QMB–Quantitative Methods in Business

ACC 6011 Financial Accounting Analysis (5)
A survey of the principles and procedures of accounting. The course covers both financial and management accounting. The principal emphasis is on the potential uses, as well as limitations, of accounting information. (No credit will be given to students who have had undergraduate or graduate equivalents.)

ACC 6313 Accounting for Decision Making (5)
A survey of the various uses of accounting information, both from the point of view of management and the investor. The course covers advanced topics in financial accounting, and the techniques utilized in financial analysis. It also emphasizes the differences among alternative accounting principles, and their effects on decision-making. Prerequisite: ACC 6011, or equivalent.

ECP 6704 Managerial Economics (5)
The application of microeconomic and macroeconomic concepts to decision making within the organization; supply and demand, market structure and market behavior in specific industries; basic aggregate economic models; and forecasting. Prerequisite: QMB 6603, or equivalent.

Master of Business Administration

FIN 6428 Financial Management (5)
In-depth examination of asset, liability and capital structure management, with emphasis on capital budgeting techniques; risk evaluation; working capital management; and methods of short term, intermediate, and long term financing. Prerequisite: ACC 6011, or equivalent.

MAN 6205 Organizational Analysis (5)
Study of concepts, theories, research, and operational problems of management. Emphasis on analyzing the management processes of planning, organizing, leading, and controlling; and their relationship to technology, environment, and the nature of the task.

MAN 6501 Operations Management (5)
This course covers the analysis of design and operations in organizational systems. The systems approach is used to provide a framework or general model of analysis, to which specific concepts, quantitative techniques, and tools can be related. The material presented has application to any organization of people and machines, including hospitals, governmental agencies, service organizations, and industrial concerns. Prerequisite: MAN 6721, or equivalent.

MAN 6713 International Business Environment (5)
A macro-examination of economic, political, and cultural variables affecting the organization. Emphasis will be placed on social indications and societal forecasting of change; organizational responses to change; and the nature and rate of change in different societies.

MAN 6721 Managerial Decision-Making (5)
This course will investigate and analyze the decision-making problems that managers face in business, volunteer organizations, government, and the public sector. Emphasis will be placed on providing a variety of decision-making experiences for the student. Prerequisite: QMB 6603, or equivalent.

MAN 6725 International Business Policy (5)
An analysis of corporate strategies in a rapidly developing and changing world environment. Emphasis will be placed on forecasting, planning, and contingency strategies. The course is taught by case method and stresses the environmental and institutional constraints on decision making within the organization. Corporate executives are invited to discuss their case whenever possible.

MAN 6726 Policy Analysis (5)
The use of cases, guest lectures, and gaming to integrate the analysis and measurement tools, the functional areas and public policy issued. The objective is to develop skill in broad areas of rational decision-making in an administrative context of uncertainty. Should be taken in the last quarter of master's program.

MAN 6830 Organization Information Systems (5)
Introduction to information systems and their role in organizations from a user's viewpoint. Survey and application of the basic concepts necessary for understanding information systems. Study of the main activities in the development cycle used to acquire information systems capability. Prerequisite: MAN 6205.

MAN 6974 Master's Project (5)
An individualized research project and report, which may include: field experience with a firm or agency; library research; computer programming; or project development. Course may only be taken with the approval of faculty adviser, Department Chairperson, and Dean.

MAR 6716 Marketing Management (5)
A study of analysis and application of theory and problem solving in marketing management. Emphasis will be on the role of marketing in the organization; planning the marketing effort; management of the marketing organization; control of marketing operations; and evaluation of the marketing contribution.

QMB 6603 Quantitative Methods in Management (5)
Introduction to basic quantitative tools for the analysis of problems arising in the management of organizations, and the application of these tools to real-life problems. (No credit will be given to students who have had undergraduate or graduate equivalents.)

Faculty

School of Business and Organizational Sciences

Dean	**N. Paul Loomba**
Associate Dean	**Karl O. Magnusen**
Associate Dean	**David Lavin**
Assistant Dean	**Donald W. Fair**
Chairpersons:	
Accounting	**Irving L. Fantl**
Finance & International Business	**Duane Kujawa**
Management	**Enzo R. Valenzi**
Marketing	**Richard M. Hodgetts**
North Miami Coordinator	**Larry A. Smith**

Faculty

Altman, Steven, D.B.A. (*University of Southern California*), *Associate Professor, Management and Associate Vice President for Academic Affairs*

Awad, Elias, D.B.A. (*University of Kentucky*), *Professor, Management*

Beaton, William R., Ph.D. (*Ohio State University*), *Professor, Finance & International Business*

Brosh, Israel, Eng.Sc.D. (*Columbia University*), *Visiting Associate Professor, Management*

Carter, Jack L., M.B.A. (*University of Cincinnati*), *Assistant Professor, Accounting*

Cascio, Wayne, Ph.D. (*University of Rochester*), *Associate Professor, Management*

Chang, Lucia S., Ph.D. (*University of Texas at Austin*), *Associate Professor, Accounting*

Deastlov, Francis, M.B.A. (*Harvard Business School*), *Assistant Professor, Finance & International Business*

Dessler, Gary, Ph.D. (*City University of New York*), *Professor, Management*

Dorsett, Herman W., Ed.D. (*Columbia University*), *Associate Professor, Management*

Erickson, Alf L., LL.M. (*University of London*), *Assistant Professor, Accounting*

Fair, Donald W., M.Acc. (*Bowling Green State University*), *CPA, Assistant Dean and Instructor, Accounting*

Fantl, Irving L., Ph.D. (*New York University*), *CPA, Chairperson and Professor, Accounting*

Farrow, Dana, Ph.D. (*University of Rochester*), *Assistant Professor, Management*

Fiedler, Anne, M.B.A. (*University of Miami*), *Instructor, Marketing*

Friday, Earnest, M.B.A. (*University of Cincinnati*), *Assistant Professor, Management*

Grosse, Robert, Ph.D. (*University of North Carolina*), *Assistant Professor, Finance & International Business*

Hallbauer, Rosalie C., Ph.D. (*University of Florida*), *CPA, C.M.A., Associate Professor, Accounting*

Hannan, Edward L., Ph.D. (*University of Massachusetts*), *Associate Professor, Management*

Hendrickson, Harvey S., Ph.D. (*University of Minnesota*), *CPA, Professor, Accounting*

Hodgetts, Richard M., Ph.D. (*University of Oklahoma*), *Professor, Management, and Chairperson, Marketing*

Hogner, Robert H., Ph.D. (*University of Pittsburgh*), *Associate Professor, Management*

Jerome, William T., III, D.C.S. (*Harvard University*), *Distinguished University Professor, Management*

Johnson, Vance, M.S. (*Georgia State University*), *Assistant Professor, Finance & International Business*

Kalogeras, Constantine, Ph.D. (*City University of New York*), *Associate Professor, Finance & International Business*

Kujawa, Duane, Ph.D. (*University of Michigan*), *Chairperson and Professor, Finance & International Business*

Lavin, David, Ph.D. (*University of Illinois*), *CPA, Associate Professor and Associate Dean, School of Business & Organizational Sciences*

Faculty

Lewis, Ronald J., Ph.D. (*Michigan State University*), *Professor, Accounting*

Loomba, N. Paul, Ph.D. (*University of Wisconsin*), *Professor and Dean, School of Business & Organizational Sciences*

Lubell, Myron, D.B.A. (*University of Maryland*), *CPA, Associate Professor, Accounting*

Luytjes, Jan B., Ph.D. (*University of Pennsylvania*), *Professor, Management*

Magnusen, Karl, Ph.D. (*University of Wisconsin*), *Associate Professor and Associate Dean, School of Business & Organizational Sciences*

Mills, Joan P., Ph.D. (*University of South Carolina*), *Assistant Professor, Management*

Most, Kenneth S., Ph.D. (*University of Florida*), *CPA, F.C.A., Professor, Accounting*

Newpeck, Frederick F., Ph.D. (*University of Massachusetts*), *Associate Professor, Management*

Nicholls, J. A. F., D.B.A. (*Indiana University*), *Associate Professor,Management*

Nunez, Leandro S., M.B.A. (*Roosevelt University*), *CPA, Instructor, Accounting*

Parker, Alan J., Ph.D. (*Columbia University*), *Associate Professor, Management*

Phillips, Edward P., LL.M. (*New York University*), *Assistant Professor, Accounting*

Prakash, Arun, M.B.A. (*University of California*), *Assistant Professor, Finance & International Business*

Raheem, Lynda, M.B.A. (*University of Miami*), *Instructor, Marketing*

Robey, Daniel, D.B.A. (*Kent University*), *Associate Professor, Management*

Rodriguez, Leonardo, D.B.A. (*Florida State University*), *Associate Professor, Management and Accounting*

Roslow, Sydney, Ph.D. (*New York University*), *Associate Professor, Marketing*

Roussakis, Emmanuel, Ph.D. (*Catholic University of Louvain, Belgium*), *Associate Professor, Finance & International Business*

Salzer, Willard M., M.A. (*University of Colorado of Boulder*), *Associate Professor, Marketing*

Seaton, Bruce F., Ph.D. (*Washington University*), *Associate Professor, Marketing*

Shapiro, Gloria, Ph.D. (*University of Miami*), *Assistant Professor, Management*

Simmons, George B., D.B.A. (*Indiana University*), *Distinguished University Professor, Finance & International Business*

Slutsky, Lois, M.S.M. (*Florida International University*), *CPA, Instructor, Accounting*

Smith, Larry A., Ph.D. (*State University of New York*), *Associate Professor, Management*

Sutija, George, M.B.A. (*Columbia University*), *Associate Professor, Finance & International Business*

Taggart, William M., Ph.D. (*University of Pennsylvania*), *Associate Professor, Management*

Thomas, Robert J., M.B.A. (*University of Miami*), *Assistant Professor, Marketing*

Turban, Efraim, Ph.D. (*University of California at Berkeley*), *Professor, Management*

Valenzi, Enzo R., Ph.D. (*Bowling Green University*), *Chairperson and Associate Professor, Management*

Vogel, Ronald H., Ph.D. (*University of Michigan*), *Associate Professor, Marketing*

Welch, William W., Ph.D. (*University of Michigan*), *Associate Professor, Finance & International Business*

Yeaman, Doria, J.D. (*University of Tennessee*), *Lecturer, Accounting*

School of Education

ed·u·ca·tion (ej′o͝o kā′s
or process of imparting o
developing the powers
and generally of preparing
for mature life. **2.** the a
acquiring particular kno
or profession. **3.** a degre
a university education. **4.**
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struction, sc
TR nply a discipli
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General Information

School of Education

The School of Education offers courses of studies and experiences for personnel who are or will be professionally engaged in education or training. Such professional development may lead to degrees at the bachelor, master, specialist, or doctoral level. In addition, it is feasible for experienced educators to pursue non-credit or certificate study and field experience.

Each applicant should review the numerous choices of major concentrations and program objectives. The range of programs includes childhood education, early childhood education, curriculum and instruction in the various subspecialties in secondary education, adult education, educational administration and supervision, bilingual and intercultural education, technical and vocational education, psycho-education, urban education, community college education and human resources development, special education, international development education, counselor education, and teacher education.

Advisement services are available by telephone (305) 552-2721, by correspondence, or by prearranged visit with a counselor at the North Miami or Tamiami Campus.

The School of Education serves county and state education agencies in inservice staff development, curriculum and materials development, joint research projects and evaluation programs. The Teacher Education Center (TEC) Program has, under formal agreement, committed specialists in the School of Education to program development and technical assistance. Of major concern is the development of urban education and bilingual education in the metropolitan areas of Dade and Broward counties. For this reason, new initiatives include programs in urban administration, urban teacher education, and Teacher Corps, adult and human resources development, and intercultural learning.

The School of Education engages in cooperative programs of study and development with national and international agencies. These include international student programs; national and international exchanges of scholars; technical assistance for the advancement of educational personnel, curriculum, materials, and research in developing nations; graduate degree and certificate programs in international development education with experiences in the major metropolitan and rural areas of Florida and, optionally, the national and international educational agencies in Washington, D.C.; global education curriculum development in schools; overseas American schooling; and study, research, and management in federal education agencies and national professional associations.

The three major purposes of the School of Education—teaching, service, and research—are realized in its commitment in local, national, and international educational endeavors.

General Program Design

Undergraduate Studies

Undergraduate courses offered by the School of Education are designed to be performance or competency based, as well as field-based for professional service in education and training.

Typically, undergraduate students will complete 90 quarter hours of study at Florida International University, including a residency requirement of 45 quarter hours prior to graduation. Prior to formal admission to the University, a student may elect to take 20 quarter hours as a Special Student which, if applicable to the major field of study, may be applied to the degree program.

Foundations of Education Requirement. Teacher education regulations in Florida require completion of one course each in the social and psychological foundations of education. These may be completed at the University or at any other accredited college or university.

Reading Competence Requirement. Florida Department of Education regulations require that teacher certification applicants show evidence of preparation in specific skills for teaching reading. All programs in the School are designed to meet this requirement.

Professional Education Core. Every teacher education student, during the junior year, must enroll in the following three common courses:

EDF 3604	Schooling in America	(5)
EDG 3321	General Teaching Lab I: Basic Teaching Skills	(5)
EDG 3322	General Teaching Lab II: Human Relations Skills	(5)

Subsequent special teaching laboratories and courses build on these core courses to extend and refine understandings and skills. All programs include one full quarter (15 hours) of student teaching.

Bachelor degree programs typically require coursework in the College of Arts and Sciences or in one of the other Schools. These courses provide necessary subject matter preparation consonant with professional preparation.

Upon completion of program requirements, the Bachelor of Science degree is awarded and qualifies the student for a Florida Rank III graduate Teacher Certificate in the field of specialization.

Graduate Studies

Graduate studies offered by the School provide specialization in degree programs developed to reflect individual student interests. A typical program will include courses, seminars, and appropriate field experiences.

Graduate students will complete at least 45 quarter hours of study at the University to earn a Master of Science in Education degree. The programs in Counselor Education and School Psychology require 90 quarter hours. As a general rule, a student may transfer 10 quarter hours taken at another accredited college or university toward a 45-quarter hour master's degree program, and 15 hours toward a 90 hour program at Florida International University. Also, prior to formal admission to the University, a student may elect to take 15 quarter hours as a Special Student which, if applicable to the major field of study, may be applied to the degree program.

Doctoral students pursue courses in cooperative programs offered by Florida International University, Florida State University, the University of Florida, and other state universities.

Reading Competencies Requirement. Florida Department of Education regulations require all teacher education applicants to show evidence of preparation in specific skills for teaching reading. This may be waived in graduate programs for students who can verify this training at the undergraduate level or in an approved in-service education program. Otherwise, and according to the student's major, either RED 6147 or RED 6333 will be required as part of the degree program.

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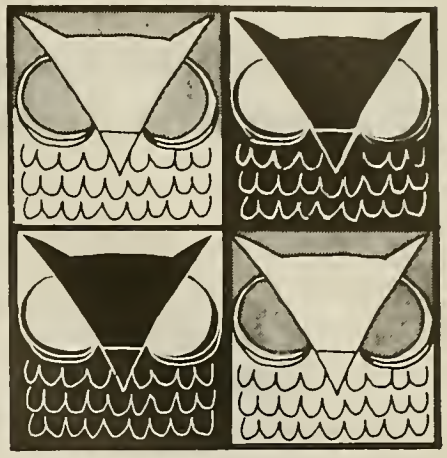
Educational Leadership and Human Resource Development



Admission

Undergraduate Studies

The School of Education will accept as an undergraduate any person who has completed a minimum of 90 quarter (60 semester) hours of general education undergraduate study.

Graduate Studies
Master's Degree Programs

An applicant for admission to graduate study must meet the existing criteria set forth by the Board of Regents of the State University System of Florida. Presently, these are a Grade Point Average of 3.0 (B) in the third and fourth year of an undergraduate program, or a combined score of 1000 on the Graduate Record Examination (verbal and quantitative sections). A special CLEP examination may be used in lieu of the GRE by certain students seeking admission to the master's degree program in Vocational Education. All applicants *must* submit a GRE test score.

Cooperative Doctoral Programs
Cooperative Specialist and Doctoral Programs

The School of Education, in cooperation with the University of Florida, Florida State University and other universities of the State University System, offers specialist and doctoral programs in several fields and is developing others. General requirements for admission to these programs are (1) a combined score of 1100 on the Verbal and Quantitative portions of the Graduate Record Examination for the doctoral program, 1000 for the specialist program; (2) a grade point average of 3.5 on previous graduate work; (3) a grade point average of 3.0 in the last two years of undergraduate study; (4) at least two years of successful experience in the field of education; and (5) at least three letters of reference.

North Miami Campus

The North Miami Campus School of Education is located at 151th Street and Biscayne Boulevard (Interama). This Campus, opened in 1977, is designed to serve South Broward and North Dade students.

The North Miami Campus has degree and certificate programs under development in the following areas: Reading, Elementary Education, Early Childhood Education, Mental Retardation, Emotional Disturbances, Educational Administration and Supervision, Technical Vocational Education, fields of Secondary Education, and Counseling.

Programs may lead to bachelor's, master's, or doctoral specialty degrees.

Of major importance is the creation of joint programs for in-service staff development in Broward and Dade County Schools. In addition, international and urban student programs are enhanced by the individual assistance evident on a new campus and by the attractive surroundings of northern Biscayne Bay.

Division of Educational Leadership and Human Resource Development

John A. Carpenter, *Professor*
Charles Divita, Jr., *Professor and Chairperson*
Stephen M. Fain, *Associate Professor*
Robert V. Farrell, *Associate Professor*
Allen Fisher, *Associate Professor*
Paul D. Gallagher, *Associate Professor*
Lorraine R. Gay, *Associate Professor*
Barry Greenberg, *Associate Professor*
John J. Kampsnider, *Associate Professor*
Peter F. Oliva, *Professor*
Sarah W. J. Pell, *Associate Professor*
Ronald Perry, *Associiate Professor*
G. Wesley Sowards, *Professor*
Jack A. Sumner, *Assistant Professor*
James D. Wells, *Associate Professor*

The Division offers graduate programs in Administration and Supervision, Adult Education, and Parks and Recreation Administration. It also offers the undergraduate "core" courses required for every teacher education student and a Bachelor's Degree in Parks and Recreation Administration.

In addition, the Division offers a number of advanced general courses, some of which are requirements of various master's degree programs offered by the School. Among these offerings are courses in Instructional Technology, Instructional Media, Analysis of Teaching, Educational Research, and Comparative and International Education.

Undergraduate Courses

The Division offers the three "core" courses required for every teacher education student: EDF 3827, EDG 3321, and EDG 3322.

A Bachelor of Science degree is granted to a student completing the Parks and Recreation curriculum. Within the general requirements in this program, the student is given an opportunity to develop a program consistent with interest s and career goals.

Parks and Recreation

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Introductory sociology and mathematics.

Recommended Courses: It is recommended that the student desiring to enter the Parks and Recreation curriculum be a graduate of a two-year program in Recreation Leadership or its equivalent.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization		**55–70**
HFT 3403	Management Accounting for the Hospitality Industry	5
LEI 3542	Principles of Park and Recreation Management	5
LEI 3630	Care and Maintenance of Grounds	5
LEI 3524	Personnel Management in Parks and Recreation	5
MAN 3010	Organization and Management	5

(Continued)

Educational Leadership and Human Resource Development

LEI 3437	Program Development in Parks and Recreation Management	5
MAN 4301	Personnel Management	5
LEI 4590	Seminar in Parks and Recreation Management	5
LEI 4940	Internship	15–30
Advised Electives		**20–35**

Students will take 20–35 quarter hours of electives after consultation with their advisor

Graduate Programs Administration and Supervision

Master's Degrees

The Division offers master's degrees in Elementary School Administration and Supervision; Secondary School Administration and Supervision; and General School Administration and Supervision (combined Elementary and Secondary). The Master of Science degree is awarded on successful completion of all requirements; the program qualifies graduates for Rank II certification in Administration and Supervision in Florida. As soon as students are admitted to the master's degree program, they should see their assigned advisors to plan a program of studies.

Requirements for each of the three programs are outlined below. In addition to the requirements shown below, each student must satisfy, prior to obtaining the degree, a state requirement of competency in the teaching of reading. The reading requirement may be satisfied by successful completion of one of the following alternatives: (1) an appropriate course or courses taken as part of the undergraduate program, (2) RED 6656, Instruction in Reading, or RED 6334, Teaching of Reading in Secondary School, at Florida International University, (3) an approved course taken at another accredited institution, or (4) an approved in-service course.

An applicant to the program in School Administration and Supervision must meet the Board of Regents criteria for admission to graduate study, possess or be qualified for a Florida Rank III graduate certificate, and have completed at least one year of successful teaching as a fulltime teacher in an elementary or secondary school. (Service as an aide or substitute does not meet the experience requirement.)

To be certified in School Administration and Supervision in Florida a person must have at least three years of successful teaching experience in an elementary or secondary school. While one year of successful teaching will meet the experience requirement for *admission* to the master's degree program, the three-year teaching experience requirement must have been completed either before or at the same time as degree requirements are completed.

Certification Program

Persons who possess a master's degree in a field other than Administration and Supervision may enroll as special non-degree seeking students to work toward certification in Administration and Supervision.

Specialist and Doctoral Programs

FIU offers in cooperation with the University of Florida specialist and doctoral programs in School Administration and in Curriculum and Instruction: Instructional Leadership. General requirements for admission to these programs are (1) 1100 score on the Verbal and Quantitative portions of the Graduate Record Examination for the doctoral program, 1000 for the specialist program, (2) 3.5 grade point average on previous graduate work, (3) 3.0 grade point average in the last two years of undergraduate study, (4) at least two years of successful experience in the field of education, and (5) at least three letters of reference. Details about these programs may be obtained from the Chairperson, Division of Educational Leadership and Human Resources Development.

Master's Program Requirements Elementary School Administration and Supervision

DEGREE: *Master of Science*

		Quarter Hours
Required Courses:		**42–44**
EDA 6061	The Organization and Operation of Public School Systems	4
EDA 6223	Emerging Designs for School Organization and Staff Utilization	4
EDA 6510	The Administration of an Elementary School	4
EDA 6930	Seminar in Administration and Supervision	3
EDA 6943	Supervised Field Experience	3–5
EDE 6205	Curriculum Design for Childhood Education	4
EDF 5481	Analysis and Application of Educational Research	4
EDG 6250	Curriculum Development	4
EDG 6285	Curriculum Evaluation and Improvement in Urban School Systems	4
EDS 6050	Supervision in Education	4
EDS 6115	Staff Development Programs in Urban School Systems	4
Electives: from Education, School of Business and Organizational Sciences, or College of Arts and Sciences		1–3
		45

Secondary School Administration and Supervision

DEGREE: *Master of Science*

		Quarter Hours
Required Courses:		**42–44**
EDA 6061	The Organization and Operation of Public Schools Systems	4
EDA 6223	Emerging Designs for School Organization and Staff Utilization	4
EDA 6530	The Administration of a Secondary School	4
EDA 6930	Seminar in School Administration/ Supervision	3
EDA 6943	Supervised Field Experience	3–5

(Continued)

Educational Leadership and Human Resource Development

EDF 5481	Analysis and Application of Educational Research	4
EDG 6250	Curriculum Development	4
EDG 6285	Curriculum Evaluation and Improvement in Urban School Systems	4
EDS 6050	Supervision in Education	4
EDS 6115	Staff Development Programs in Urban School Systems	4
ESE 6215	Secondary School Curriculum	4

General School Administration and Supervision

DEGREE: *Master of Science*

		Quarter Hours
Required Courses:		**50–52**
EDA 6061	The Organization and Operation of Public School Systems	4
EDA 6223	Emerging Designs for School Organization and Staff Utilization	4
EDA 6510	The Administration of an Elementary School	4
EDA 6530	The Administration of a Secondary School	4
EDA 6930	Seminar in School Administration/ Supervision	3
EDA 6943	Supervised Field Experience	3–5
EDE 6205	Curriculum Design for Childhood Education	4
EDF 5481	Analysis and Application of Educational Research	4
EDG 6250	Curriculum Development	4
EDG 6285	Curriculum Evaluation and Improvement in Urban School Systems	4
EDS 6050	Supervision in Education	4
EDS 6115	Staff Development Programs in Urban School Systems	4
ESE 6215	Secondary School Curriculum	4

Adult Education

The Graduate Program in Adult Education is designed for the individual who is serving, or chooses to serve as learning facilitator, training director, counselor, administrator, curriculum developer and/or researcher in adult and continuing education programs in business and industry, public schools, hospitals, governmental agencies, community colleges, universities, civic organizations, military service or other agencies. Graduate programs of study are designed in relation to an individual's specific interests, needs and career goals.

The Division offers two master's degree programs in Adult Education–Adult Education: Administration and Supervision, and Adult Education; Curriculum and Instruction. Two options are possible in the Administration and Supervision program: (1) Public School Administration (which leads to Florida Rank II certificate), or (2) General Administration/Non-Public School Administration (not a certification program).

Professional Certificate in Adult Learning Systems

The professional certificate in adult learning systems is a comprehensive and integrated university-based option to provide professionals with skills and training for adult education programmers. The non-degree certificate program may be pursued (1) in conjunction with a bachelors or masters degree; or (2) beyond the bachelors or masters degree; or (3) independent of the pursuit of a degree. The latter option is for persons having special responsibilities and experiences in the field of Adult/Continuing Education.

The required course of study and required sequence is as follows: (total–20 hours)

		Quarter Hours
Required Courses:		**20**
ADE 5925	Workshop in Adult Education	2
ADE 5385	Adult Teaching and Learning	4
ADE 5180	Program Development in Adult Education Community Level	4
ADE 5383	Program Development in Adult Education Instructional Level	4
ADE 5935	Special Topics in Adult Education Advised Electives	4
ADE 6930	Seminar in Adult Education Research, Evaluation, and Problem Solving in Adult Education	2

Admission:

To be admitted to the program the student must:

a. Hold or be seeking a bachelor's or master's degree from an accredited institution;
b. Have submitted three letters of endorsement describing ability to engage in and profit from such a program of studies;
c. submit a personal statement of interests and goals which relate to adult/continuing education.

Applicants will develop a project or problem-oriented learning contract during the initial workshop to be pursued throughout the program. Contracts will be refined as the student progresses through the first part of the program of studies. The culminating activity, the Seminar, ADE 6930, will require the student to complete, share and evaluate the tasks and activities within the individual learning contract.

Cooperative Doctoral Program

A Miami-based cooperative FIU/FSU program leading to the Doctor of Education (Ed.D.) with a major in Adult Education is anticipated for the Winter Quarter, 1980. This program is directed toward a broad spectrum of personnel from business and industry, government, public school, community colleges and universities, health agencies, libraries, religious and civic organizations, etc., whose major responsibilities call for leadership in designing, providing and evaluating education and training programs for adult learners.

Students making application to the program should consult with the academic advisors for

(Continued)

Educational Leadership and Human Resource Development

the FIU/FSU cooperative doctorall program in order to ensure proper guidance.

Administration and Supervision

DEGREE: *Master of Science*

		Quarter Hours
Required Core: to be selected with an advisor from the following:		24–28
ADE 5081	Principles and Practices of Adult Education	4
ADE 5260	Organization and Administration of Adult Education	4
ADE 5385	Adult Teaching and Learning	4
ADE 5180	Program Development in Adult Education: Community/ Institutional Level	4
EDF 5481	Analysis and Application of Education Research	4
RED 6337	Teaching Reading in the Secondary School	4
ADE course as elective		4
Area of Professional Emphasis:		12

Option A: Public School Administrator Certification (12)

EDA 6061	The Organization and Operation of Public School Systems	4
EDS 6050	Supervision in Education	4
EDG 6250	Curriculum Development	4

or

Option B: General Administration/ Non-Public School Administration (12):

Administration-related courses may be selected from education, business, management, public administration or other areas, in consultation with an advisor.

Electives: The candidate will be encouraged to select courses that will increase competence in a teaching specialty or a supportive social/ behavioral science. 5–9

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Curriculum and Instruction

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		24
ADE 5081	Principles and Practices of Adult Education	4
ADE 5260	Organization and Administration of Adult Education	4
ADE 5385	Adult Teaching and Learning	4
ADE 5180	Program Development in Adult Education: Community/ Institutional Level	4
ADE 5383	Program Development in Adult Education: Instructional/Activity Level	4
ADE course as elective		4
Area of Professional Emphasis:		12
EVT 5168	Curriculum Development in Vocational Education	4
or		
EDG 6250	Curriculum Development	4
EDF 5287	Instructional Technology	4
EDF 5481	Analysis and Application of Educational Research	4
Electives:		9

The candidate will be encouraged to select courses that will increase competence in a teaching specialty or a supportive social/behavioral science.

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Parks and Recreation Administration

The graduate program in Parks and Recreation Administration is planned to provide advanced preparation for administrative and supervisory level positions within a leisure services delivery system. The program includes electives which give flexibility regarding an individual's specific career goals as a future practitioner in Parks and Recreation Administration.

To enter the program in Parks and Recreation Administration, a student must: (1) have a 3.0 GPA in upper division work or score 1000 or more on the Graduate Record Examination, and (2) possess a bachelor's degree, and have appropriate undergraduate preparation in recreation.

DEGREE: *Master of Science*

		Quarter Hours
Professional Education:		413
LEI 5510	Program Administration in Parks and Recreation	4
LEI 5440	Program Development in Parks, and Recreation	4
PAD 6106	Organization Theory and Administrative Behavior	5
Areas of Specialization:		18–32
PAD 6417	Public Personnel Administration	5
PAD 6227	Public Finance and the Budgetary Process	5
LEI 5595	Seminar in Parks, Recreation, and Athletic Management	4
LEI 5907	Individual Study	1–5
LEI 6922	Supervised Field Experiences in Parks and Recreation	5–15
Electives:		14

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Course Descriptions

Definition of Prefixes

ADE–Adult Education; EDA–Education: Administration; EDE–Education: Elementary; EDF–Education: Foundations; EDG–Education: General; EDS–Education: Supervision; EME–Education: Technology and Media; ESE–Education: Secondary; LEI–Leisure.

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Educational Leadership and Human Resource Development

General Professional Education

EDF 3827 Schooling in America (5)(F,W,S,SS)
Systematic analysis of contemporary schooling and development of an understanding of the nature of educational systems, and the impact of political, legal, fiscal, and cultural issues upon these systems.

EDF 5216 Affective Learning in the Classroom (4)(S)
A behavioral approach to affective teaching techniques, including theoretical background, behavioral definitions, writing affective objectives, and evaluation of affective learning in the classroom. A field experience will be included.

EDF 5287 Instructional Technology: Systems Approach (4)(F)
Development of instructional competencies, with an emphasis on the use of a systems approach in the design, implementation, and evaluation of programs.

EDF 5430 Measurement and Evaluation in Education (4)(F)
Competencies required for the design, construction or selection, and evaluation of measuring instruments.

EDF 5481 Analysis and Application of Educational Research (4)(F,W,S,SS)
Competencies required for the design, implementation, and evaluation of educational research, including: problem formulation and analysis; sample selection; instrument selection; formulation of research design and procedure; and data analysis.

EDF 5710 National Educational Systems: A Comparative Analysis (4)(W)
Examination of educational structures and guiding educational objectives in a limited number of both developed and developing countries. Analysis of the responses of national educational systems to common educational issues.

EDF 5720 Latin American Education: An Historical and Contemporary Overview (4)(S)
Historical and current development of Latin American education, and analysis of the principal forces shaping this development.

EDF 5724 African Educational Systems: A Comparative Approach (4)(S)
Contemporary trends and issues of education in selected independent African countries, with historical analysis of colonial educational policies and practices.

EDF 5780 Intercultural Education: National and International Perspectives (4)(F)
Analysis of concepts and programs of intercultural and international education. Consideration of the role of education in fostering intercultural understanding both nationally and internationally.

EDF 5905 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Topics are to directly relate to content of EDU courses. Independent study may not substitute for regular course offerings. Prerequisite: Written permission of the chairman of the Division and the approval of the instructor.

EDF 5955 Field Study Abroad (5–10)(ARR)
Development of international and cross-cultural understandings of educational philosophies and systems through planned travel and study abroad.

EDF 6215 Application of Learning Theory to Instruction (4)(W)
Competencies required for analysis of selected learning theories and application of these theories to an instructional system.

EDF 6486 Research Methods in Education: Experimental Design and Analysis (5)(W)
Competencies required for the design and analysis of complex educational problems, including: formulation of pre-experimental, true experimental, quasi-experimental, and factorial designs; and related analyses. Prerequisite: EDF 5481.

EDG 3321 General Teaching Laboratory I: Basic Teaching Skills (5)(F,W,S,SS)
Practice in generic teaching skills, techniques and strategies basic to all age levels and subject matter areas. Lecture, seminar, and laboratory.

EDG 3322 General Teaching Laboratory II: Human Relations Skills (5)(F,W,S,SS)
Development of human relations skills to facilitate interaction and prepare students to deal with individuals and groups in a multi-ethnic urban classroom.

EDG 5325 Analysis of Teaching (4)(W)
Examination of the research on instruction in teaching, and the development of skills in the observation and analysis of teacher behavior.

EDG 6925 Workshop in General Professional Education (3–5)(ARR)
Offers an opportunity for school personnel to participate in a problem-oriented workshop in one of the fields of general professional education.

EME 5315 Instructional Media (4)(W)
Development of competencies for effective selection and utilization of instructional media. Consideration of sources, selection, evaluation, and methods of implementing media.

ADMINISTRATION AND SUPERVISION*

EDA 6061 The Organization and Operation of Public School Systems (4)(F,SS)
Examines the public school system as a complex formal organization; the dynamics of community-school interactions; goal clarification and program evaluation; procurement and allocation of resources; and the legal context within which the school system operates.

EDA 6223 Emerging Designs for School Organization and Staff Utilization (4)(W,SS)
Critical analysis of alternatives to traditional school organization and staffing, and possible future alternatives in public education.

EDA 6510 The Administration of an Elementary School (4)(F,S)
Development of competencies required to function as the principal of an elementary school, with particular attention to the urban setting.

EDA 6530 The Administration of a Secondary school (4)(F,S)
Development of competencies required to function as the principal of a secondary school, with particular attention to the urban setting.

EDA 6905 Individual Study in School Administration/Supervision (1–5)(ARR)
For advanced students wishing to undertake an individual project directly related to school administration or supervision. May not substitute for regular course offerings. Prerequisites: (1) The student must be in a master's degree program in educational administration and supervision at this university, and (2) written permission of the chairman of the Division and then approval of the instructor is required.

EDA 6928 Workshop in School Administration/Supervision (3–5)(ARR)
Offers an opportunity for experienced school administrators and supervisors to participate in a problem-oriented workshop.

EDA 6930 Seminar in School Administration/Supervision (3)(S)
In-depth study of selected issues and developments in school administration and supervi-

(Continued)

Educational Leadership and Human Resource Development

sion, including an examination of related research.

EDA 6943 Supervised Field Experience (1–5)(F,W,S)
Development of supervisory skills by undertaking an arranged field-based assignment. Prerequisites: The student must be in a master's degree program in educational administration and supervision at this university, and must have completed most of the required program courses. Also offered each quarter for students in the FIU/UF Cooperative Specialist and Doctoral Programs.

EDG 6250 Curriculum Development (4)(W,SS)
Development of basic technical constructs of curriculum. Planning of reality-based educational programs at all levels of schooling.

EDG 6285 Curriculum Evaluation and Improvement in Urban School Systems (4)(W,SS)
Development of skills in curriculum evaluation and strategies for improvement of on-going curriculum.

EDS 6050 Supervision in Education (4)(W,SS)
Examines supervision as a process and the supervisory role in an educational setting, with particular attention to the development of supervision skills necessary to facilitate both individual and group change.

EDS 6115 Staff Development Programs in Urban School Systems (4)(F,SS)
Identification and analysis of various staff training strategies and techniques used in an educational setting, with an emphasis on defining staff problems and the processes by which such problems are solved.

*Quarters indicated below are for Tamiami Campus and subject to change. Quarters in which courses will be offered on the North Miami Campus will be published in future catalogs.

ADULT EDUCATION

ADE 5081 Principles and Practices of Adult Education (4)(F,S)
Developing a rationale for and philosophy of adult education; contrasting agencies, programs, and curricula; evaluating adults' educational pursuits; analyzing factors affecting adult education; differentiating adults and youths as learners; planning and appraising programs for adults.

ADE 5180 Program Development in Adult Education: Community/Institutional Level (4)(F,S)
Analyzing variables central to program and community development; analyzing principles and roles requisite for effective group functioning; developing a consensus group philosophy; designing, conducting and interpreting studies of community objectives; mobilizing and integrating resources; planning, conducting and interpreting evaluation studies.

ADE 5195 Designing Educational Programs for Disadvantaged Adults (4)(S)
Distinguishing various forms of disadvantagement; analyzing these problems and forces which inhibit their solution; critiquing responses to these problems; developing training programs, curricula and materials, recruitment strategies, and evaluation designs.

ADE 5260 Organization and Administration of Adult Education (4)(W)
Analyzing regulations affecting adult education; selecting and training staff; selecting organization patterns appropriate for given programs; executing managerial responsibilities; arranging for community involvement; and administering supportive services.

ADE 5383 Program Development in Adult Education: Activity/Instructional Level (4)(S)
Analyzing models for instructional design; identifying and evaluating variables related to such models; developing designs unique for adult learners.

ADE 5385 Adult Teaching and Learning (4)(W,SS)
Differentiating theories of learning in relation to teaching adults; contrasting characteristics of adults as opposed to youth; evaluating the implications of such distinctions in relation to learning situations appropriate for adults.

ADE 5906 Individual Study in Adult Education (1–5)(F,W,S,SS)
Specialized intensive study in areas of interest to the student. Subject to approval of program adviser.

ADE 5925 Workshop in Adult Education (3–15)(APR)
Short-term intensive developmment of selected operational competencies related to instructional, curricular and/or administrative skills, practices, and procedures of special interest to students in adult education.

ADE 5935 Special Topics in Adult Education (1)(APR)
"Mini-courses" which provide for an examination of special facets of adult education

ADE 5945 Supervised Field Experiences in Adult Education (1–15)(F,W,S,SS)
Internship placements in various on-going adult education programs, according to students' needs and interests. On-site supervisory visits are made by program advisor. Joint conferences and seminars involving the student, the program advisor, and an appropriate representative of the cooperating agency are also conducted intermittently.

ADE 6930 Seminar in Adult Education (2–4)(S)
Provides intensive study of instructional, curricular, and/or administrative principles and practices, for the solution of problems of special interest to students in adult education.

PARKS AND RECREATION

LEI 3437 Program Development in Parks and Recreation Management (5)(S)
Students will attain competencies in developing objectives, planning a program, and implementing and administering the program.

LEI 3524 Personnel Management in Parks and Recreation (5)(W)
After a study of human interaction in a management setting, students will demonstrate competencies necessary for hiring staff, conducting group dynamics, communicating to the public, and administering democratically.

LEI 3542 Principles of Park and Recreation Management (5)(F)
An exploration of the field of recreation and parks including career areas. Students will be expected to demonstrate an understanding of management responsibilities and supervisory level principles and theory.

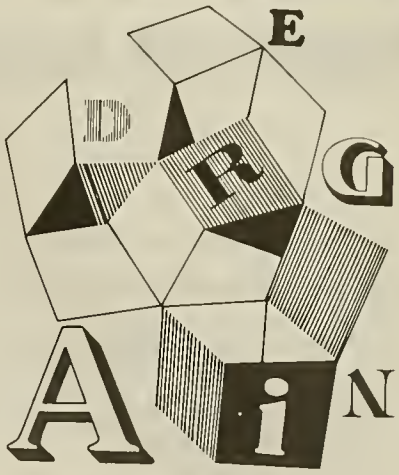
LEI 3630 Care and Maintenance of Grounds (5)(W)
A study of procedures for maintaining outdoor facilities. Students will be expected to display competence in proper maintenance of areas normally found in parks and recreation centers.

LEI 3631 Turf Grass Management (5)(F)
A practical approach to the care and maintenance of special grasses such as those found on golf courses and other recreational facilities.

LEI 4590 Seminar in Parks and Recreation Management (5)(S)
A discussion of current problems, issues and trends in parks and recreation management, which will help the student develop those competencies necessary to deal with everyday aspects of particular programs.

(Continued)

Childhood Education



LEI 4940 Internship (15)(F,W,S,SS)
An on-the-job training program designed to enable students to develop those competencies which can only be gained from practical experience.

LEI 5440 Program Development in Parks and Recreation (4)(W)
The development of specific programs in parks and recreation with emphasis on special programs for young children, retardates, handicapped persons, and the elderly.

LEI 5510 Program Administration in Parks and Recreation (4)(F)
A detailed analysis of administrative procedures and responsibilities in connection with parks and recreation facilities and personnel.

LEI 5595 Seminar in Parks and Recreation Administration (4)(S)
A discussion of current problems, issues, and trends in administration of parks and recreation programs.

LEI 5907 Individual Study in Parks and Recreation Administration (1–5)(F,W,S)
An opportunity for individuals interested in various aspects of park and recreation administration to work on their own under the close supervision of an advisor. Permission of the instructor and Department Chairperson required.

LEI 6922 Supervised Field Experiences in Parks and Recreation Administration (5–15)(F,W,S)
A practical experience for individuals interested in administrative responsibilities. Permission of the instructor and Department Chairperson required.

Division of Childhood Education

Richard L. Campbell, *Associate Professor and Chairperson*
Edythe Margolin, *Professor*
George S. Morrison, *Professor*
Nicholas J. Vigilante, *Professor*
Arthur D. Dempsey, *Associate Professor*
Kathleen A. Gurucharri, *Associate Professor*
Grover C. Mathewson, *Associate Professor*
Edward M. Reichbach, *Associate Professor*
Emma W. Rembert, *Associate Professor*
Zola J. Sullivan, *Associate Professor*
Sharon W. Kossack, *Assistant Professor*
Alicia Mendoza, *Assistant Professor*
John Stinson, Jr., *Assistant Professor*

The Division offers programs at the bachelor's and master's levels. All programs satisfy teacher certification standards of the State of Florida.

Undergraduate Programs

The Division of Childhood Education offers professional education programs designed to prepare its students to teach in Elementary and Middle Schools. Students desiring certification in Early Childhood Education can meet that requirement by completing the fifteen (15) quarter hour area of concentration requirement in Early Childhood Education. The courses in this area of concentration are: EEC 4203, EED 4301, and EEC 4611.

A student major in the Division, upon admission to the University, is assigned an advisor who will assist the student in planning a program of study. The program of study must comply with the degree requirements of the University, and will reflect the career goals of the student. Upon completion of work specified in the program of study, the student is awarded a *Bachelor of Science Degree*, and qualifies for Rank III certification in the state of Florida. The typical program of study is outlined below.

Student Teaching and Field Experiences

All undergraduate courses offered by the Division require a minimum of three hours per week, per course, of observation and participation in designated schools.

The student teaching assignments are fulfilled in designated schools under the direction of classroom teachers and University faculty. This experience is on a full-time basis for a complete quarter. Permission for student teaching will be contingent upon successful completion of all other requirements specified in the program of study. In general, the student is expected to enroll for student teaching in the senior year. Student teaching is *not* offered in the summer quarter.

An application for student teaching may be obtained from the Coordinator for Student Teaching and Field Experiences of this Division. Specific deadlines for the submission of applications are posted each quarter at the Division office. Each student should obtain information from the advisor concerning the appropriate quarter for student teaching.

Elementary Education, Grades 1–6

DEGREE: *Bachelor of Science*
LOWER DIVISION PREPARATION:
Required Courses: An *Associate of Arts* degree or equivalent preparation in basic general education. If a student has not completed equivalents of the courses noted below, these courses must be completed at the University.
MAE 4810 *and* MAE 4811 or their equivalents
Art Skills
Music Skills
Two science courses selected from biological and/or physical sciences.

(Continued)

Childhood Education

Foundations of Education (see General Program Designs).

UPPER DIVISION PROGRAM:

		Quarter Hours
Physical Education:		
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
HLP 3013	Health and Physical Education for Children	5
ARE 3313	Experiencing Art in The Elementary School	5
MUE 3313	Experiencing Music in The Elementary School	5
RED 4310	Communication Skills I	5
LAE 4314	Communication Skills II	5
RED 4311	Communication Skills III	5
SSE 4312	Inquiry in Social Studies in The Elementary School	5
MAE 4312	Inquiry in Mathematics in The Elementary School	5
SCE 4310	Inquiry in Science in The Elementary School	5
EDE 4943	Student Teaching	15
Area of Concentration:		15
		90

Each elementary Education major must complete a study program in an area of concentration consisting of at least 15 quarter hours to extend the student's background of information and understanding in a chosen area. A wide variety of choices exists; the student should consult the advisor.

Graduate Programs

The Division of Childhood Education offers a master's program in Elementary Education. The program is designed to acquaint teachers with contemporary research, and programs, and to refine the teaching skills of persons employed in Elementary and Middle Schools. The completion of the master's degree in the Elementary program qualifies a person for Instruction/Curriculum leadership positions in Elementary Education.

The program leads to a degree of Master of Science in Education and qualifies a graduate for Rank II certification in Elementary and Middle Schools in the State of Florida.

Applicants for admission to programs in Elementary Education and Early Childhood Education must: (1) hold or qualify for a Florida Rank III certification or its equivalent in Elementary Education, and (2) satisfy requirements for scholastic aptitude as determined by the graduate admissions standards.

The Master of Science in Reading develops competencies in diagnosis and remediation; production and evaluation of reading materials; teaching of reading K to 12; and administration and supervision of remedial, corrective, development, and content area reading programs. The graduate is competent to take leadership in improving reading instruction and preventing reading failure in the schools.

Requirements for admission to the Master's in Reading Program are: (1) completion of an appropriate undergraduate teacher education program, (2) satisfactory scholastic aptitude, as determined by the graduate admission standards and, (3) three years of teaching experience after completion of the undergraduate degree.

A student must file a program of study with the advisor. The program of study must comply with the general master's degree requirements and reflect the career goals of the student. A typical program of study consists of 45 quarter hours of course work. Generally, ten quarter hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

Elementary Education

DEGREE: *Master of Science*

		Quarter Hours
General Professional Education:		
EDE 6205	Curriculum Design for Childhood Education	4
EDF 5481	Analysis and Application of Educational Research	4
One course in sociology or psychology (consult advisor)		
Area of Specialization:		
EDE 6225	Educational Programs for Older Children	4
RED 6155	Instruction in Reading	4
(Other courses to be selected from among Elementary course listings)		16
Electives:		9
		45

Early Childhood Education

DEGREE: *Master of Science*

		Quarter Hours
General Professional Education:		
EDE 6205	Curriculum Design for Childhood Education	4
EDF 5481	Analysis & Application of Educational Research	4
One course in sociology or psychology (consult advisor)		
Area of Specialization:		
EEC 6205	Education Programs for Younger Children	4
RED 6155	Instruction in Reading	4
(Other courses to be selected from Early Childhood course listings)		16
Electives:		9
		45

Reading

DEGREE: *Master of Science*

		Quarter Hours
General Professional Education:		
EDF 5481	Analysis and Application of Educational Research	4
EDE 6205	Curriculum Design for Childhood Education	4
EDF 5430	Measurement and Evaluation in Education	4
Area of Specialization:		
(Courses to be selected in consultation with the advisor)		29
Electives:		4
		45

Course Descriptions

Definition of Prefixes

ARE–Art Education; EDE–Education: Elementary; EEC–Education: Early Childhood; FLE–Foreign Language Education: HLP–Health, Leisure, and Physical Education; LAE–Language Arts and English Education; MAE–Mathematics Education; MUE–Music Education; RED–Reading Education; SCE–Science Education; SSE–Social Studies Education.

ARE 3313 Experiencing Art in The Elementary School (5)(F,W,S,SS)

Designed to provide the student with competencies necessary for the development and implementation of art experiences in the elementary curriculum. Prerequisites: EDF 3827, EDG 3321, EDG 3322. Art skills or equivalent.

(Continued)

Childhood Education

ARE 6304 Instruction in Art (Early Childhood) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

ARE 6315 Instruction in Art (Elementary) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

EDE 4925 Workshop in Elementary Education (1-5)(F,W,S,SS)
An opportunity for students to continue to develop competency in a specified area of elementary education. No prerequisites.

EDE 4943 Student Teaching (15)(F,W,S)
A field experience in an elementary school where the student serves as a teacher associate, demonstrating competencies acquired throughout the program. Prerequisites: ARE 3313, HLP 3013, LEA 4314, MUE 4312, MUE 3313, RED 4310, RED 4311, SCE 4310, SSE 4312.

EDE 5905 Individual Study in Elementary Education (1-5)(F,W,S,SS)
Individual investigation in the area of instruction, in elementary education. Permission of instructor required.

EDE 6205 Curriculum Design for Childhood Education (4)(F,SS)
A study of curriculum theory, construction and evaluation.

EDE 6225 Education Programs for Older Children (4)(W)
Programs developed for older children; curriculum trends based on contemporary psychological, educational and sociological research.

EDE 6925 Workshop in Elementary Education (3-5)
An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields, in elementary education.

EDE 6930 Seminar in Elementary Education (3)(W)
Advanced study of critical issues and problems in elementary education.

EDE 6948 Supervised Field Experience in Elementary Education (5-15)(W,S)
Field work in education institutions and organizations, in elementary education.

EEC 4203 Curriculum and Instruction in Early Childhood Education (5)(W,S)
Practical considerations of basic principles, experiments, research and trends related to early childhood education. Examination of materials and techniques of teaching and working with parents. Observation and participation are required. Senior class status required.

EEC 4301 Early Childhood Education Programs (5)(F,S)
Philosophy and theories of early childhood education; physical, emotional, social and mental development. Observation and participation are required. Senior class status required.

EEC 4611 Trends in Early Childhood Education (5)(F,W)
Understanding and dealing with critical issues; assessing the progress of contemporary programs locally and nationally; and recommending solutions for current problems.

EEC 4925 Workshop in Early Childhood Education (1-5)(F,W,S,SS)
An opportunity for students to continue to develop competency in a specified area of early childhood education. No prerequisites.

EEC 5906 Individual Study in Early Childhood Education (1-5)(F,W,S,SS)
Individual investigation in the area of instruction, in preschool and early childhood education. Permission of instructor required.

EEC 6205 Education Programs for Younger Children (4)(W)
Programs developed for young children; curriculum trends based on contemporary psychological, educational and sociological research.

EEC 6926 Workshop in Early Childhood Education (3-5)
An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields, in preschool and early childhood education.

EEC 6932 Seminar in Early Childhood Education (3)(W)
Advanced study of critical issues and problems in preschool and early childhood education.

EEC 6948 Supervised Experience in Early Childhood Education (5-15)(W,S)
Field work in educational institutions and organizations, in preschool and early childhood education.

FLE 4151 Bilingual School Curriculum and Organization (5)(F)
Development of a theoretical understanding of the nature of bilingualism, a rationale for bilingual education, and a set of principles and skills for organizing bilingual/bicultural curriculum experiences in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

FLE 4870 Teaching Spanish as a Second Language (5)(SS)
Development of instructional skills, techniques, and strategies for teaching Spanish to nonnative speakers of Spanish in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, & Spanish proficiency.

FLE 4871 Teaching Spanish to Speakers of Spanish (5)(S)
Development of understandings and teaching skills needed in presenting integrated non-official language/language arts programs which would consider factors of languages and cultures in contrast. Prerequisites: EDF 3827, EDG 3321, EDG 3322, & Spanish proficiency.

HLP 3013 Health and Physical Education for Children (5)(F,W,S,SS)
Designed to provide competencies necessary for the development and implementation of programs concerning use of leisure time and maintenance of personal health and family life. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

LAE 4314 Communication Skills II (5)(F,W,S,SS)
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using language arts activities to enhance communications skills. Prerequisite: RED 4310.

LAE 4851 Teaching English as a Second Language (5)(W)
Development of instructional skills, techniques, and strategies for teaching English as a second language in the elementary school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, and English proficiency.

LAE 5414 Children's Literature (5)(F)
Designed to develop a critical analysis of the purposes, strategies for teaching, and evaluation of literature for children. Prerequisites: RED 4310, LAE 4314.

LAE 6305 Instruction in Language Arts (Early Childhood) (4)(W)
Refinement of skills related to program development, methods of teaching, selection of materials and review of research, in preschool and early childhood education.

LAE 6355 Instruction in Language Arts (Elementary) (4)(W)
Refinement of skills related to program development, methods of teaching, selection of materials and review of research, in elementary education.

(Continued)

Childhood Education

MAE 4312 Inquiry in Mathematics in the Elementary School (5)(F,W,S,SS)
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using mathematics as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322, MAE 4810 and MAE 4811, or equivalent.

MAE 5555 Diagnosis and Remediation in Mathematics (4)(F)
Strategies for studying symptoms, causes and consequences of difficulties experienced by children in elementary school mathematics. Includes supervised case study and theoretical models. Prerequisite: MAE 4312.

MAE 6305 Instruction in Mathematics (Early Childhood) (4)(W,SS)
Refinement of skills related to program development, methods of teaching, selection of materials and review of research, in preschool and early childhood education.

MAE 6318 Instruction in Mathematics (Elementary) (4)(W,SS)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

MUE 3313 Experiencing Music in the Elementary School (5)(F,W,S,SS)
Designed to provide the student with competencies necessary for the development and implementation of music experiences in the elementary curriculum. Prerequisites: EDF 3827, EDG 3321, EDG 3322, Music skills or MVS 3116.

MUE 6305 Instruction in Music (Early Childhood) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

MUE 6316 Instruction in Music (Elementary) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

RED 4310 Communication Skills I (5)(F,W,S,SS)
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of reading. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

RED 4311 Communication Skills II (5)(F,W,S,SS)
Designed to implement and expand upon the teaching competencies developed in LAE 4314 and RED 4310, in a classroom management practicum. Prerequisites: LAE 4314 and RED 4310.

RED 4925 Workshop in Reading Education (1-5)(F,W,S,SS)
An opportunity for students to continue to develop competency in a specified area of reading education. No prerequisites.

RED 5447 Analysis and Production Reading Materials (5)(S)
Exploration, creation and evaluation of basic reading materials, commercial and non-commercial. Prerequisite: RED 4310, or equivalent.

RED 5911 Individual Study in Reading (1–5)(F,W,S,SS)
Individual investigation in the area of instruction. Permission of instructor required.

RED 6155 Instruction in Reading (Elementary) (4)(F,SS)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

RED 6247 Organization and Supervision of Reading Program (4)(F)
The organization and supervision of reading programs; problems of organization and supervision; continuity of school-wide programs, emphasis on leadership responsibilities. Prerequisites: EDF 5481, EDF 5430

RED 6305 Instruction in Reading (Early Childhood) (4)(F,SS)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

RED 6337 Teaching Reading in the Secondary School (4)(W)
Development of skills necessary to identify reading problems in the classroom. Emphasis on how to use reading inventories and diagnostic tests as well as materials and techniques for teaching reading skills and assisting students to overcome reading deficiencies. Special attention to reading problems of students in the specific subject areas. Prerequisite: one course in reading.

RED 6315 Programs of Remediation in Reading (5)(W)
A course demonstrating corrective and remedial procedures; application of specific psychological, pedagogical, and psychotherapeutic techniques. Prerequisites: RED 4310, RED 6546, or their equivalents.

RED 6546 Diagnosis of Reading Difficulty (5)(F)
Technique for analyzing and clarifying reading difficulties. Prerequisite: RED 4310, or its equivalent.

RED 6747 Research in Reading (4)(W)
A course to study significant research in reading, and research methodology. Involves planning and research in reading. Permission of instructor required. Prerequisites: EDF 5430, EDF 5481.

RED 6805 Practicum in Reading (4)(S)
An analysis of reading difficulties, through various teaching techniques and programs.

RED 6845 Clinical Procedures in Reading (4)(SS)
Supervised experience, resulting in diagnosis, prescription and evaluation of particular children in a clinical setting.

RED 6925 Workshop in Reading (3–5)
An opportunity for teachers to continue to develop competency in a specified area under the guidance of a specialist in selected fields in reading education.

SCE 4310 Inquiry in Science in the Elementary School (5)(F,W,S,SS)
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using science as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

SCE 6306 Instruction in Science (Early Childhood) (4)(F)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

SCE 6315 Instruction in Science (Elementary) (4)(F)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

SSE 4312 Inquiry in Social Studies in the Elementary School (5)(F,W,S,SS)
Designed to develop and refine those teaching competencies which allow the student to perform effectively as a teacher of children, using social studies as a mode of inquiry. Prerequisites: EDF 3827, EDG 3321, EDG 3322.

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Psycho-Educational Services

SSE 6305 Instruction in Social Learning (Early Childhood) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in preschool and early childhood education.

SSE 6355 Instruction in Social Learning (Elementary) (4)(S)
Refinement of skills related to program development, methods of teaching, selection of materials, and review of research, in elementary education.

Division of Psycho-Educational Services

Wendy J. Cheyney, *Chairperson and Associate Professor*
Carlos M. Alvarez, *Associate Professor*
Marisal R. Gavilan, *Associate Professor*
Daniel A. Kennedy, *Associate Professor*
Philip J. Lazarus, *Assistant Professor*
Luretha F. Lucky, *Assistant Professor*
David E. Nathanson, *Professor*
Howard Rosenberg, *Assistant Professor*
Colleen A. Ryan, *Associate Professor*
Donald C. Smith, *Professor*
Stephen S. Strichart, *Professor*
Jethro W. Toomer, *Associate Professor*
Sandra Woods, *Assistant Professor*

Programs within the Division of Psycho-Educational Services are designed to train professionals to optimally meet the needs of individuals who experience cognitive, academic, and/or social-emotional difficulties that interfere with their progress in school and in the community. Specific competencies are delineated for classroom and resource room teachers of exceptional students, diagnostic and consultant teachers, school and community counselors, and school psychologists.

The various programs emphasize the blending of research and theory with practical applied experience, and consider the urban, multicultural nature of the University community, as well as more general national trends within specific fields. All programs involve extensive fieldwork with accompanying seminars. Independent study courses are available to allow students to pursue specialized interests and needs.

In addition to its regular programs, the Division of Psycho-Educational Services offers experiences through federally funded programs (Bureau of Education of the Handicapped) designed to provide specialized skills in vocational education for the handicapped and to develop competencies for personnel working with the severely/profoundly handicapped.

Undergraduate Programs

The undergraduate special education program emphasizes the development of competencies in diagnosing learning and behavior problems, and prescribing and implementing an appropriate curriculum for exceptional children and youth. The trainee is prepared to conduct total classroom experiences for exceptional children, and, in addition, to reintegrate into the mainstream of education those students who are able to function full or part-time in the regular classroom. Programs have been planned to meet the requirements of Florida for *Rank III* certification in each of the following areas of specialization: Mental Retardation, Emotional Disturbances, and Specific Learning Disabilities. A student may elect a major in any one of the three areas.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: An Associate of Arts degree or equivalent preparation in basic general education. A student must complete the courses noted below or their equivalents, with a grade "C" or better:

Foundations of Mathematics: MAE 4810 or MAE 4811
Foundations of Education: (See General Program Designs).
Art Skills
Music Skills
Two science courses selected from biological and/or physical sciences.

UPPER DIVISION PROGRAM:

		Quarter Hours
*Professional Education:**		**80**
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Lab I	5
EDG 3322	General Teaching Lab II	5
EEX 3010C	Introduction to Exceptional Children and Youth	5
SPA 3000	Introduction to Language Development and Communication Disorders	5
EEX 3221	Assessment of Exceptional Children and Youth	5
BSC 3023 *or* EEX 3202	Human Biology / Foundations of Exceptionality	5
RED 4310	Communication Skills, I	5
EEX 4241	Academic Skills for Exceptional Children I	5

EEX 4242	Academic Skills for Exceptional Children II	5

One of the following 3 courses depending upon major:

EMR 4360	Educational Planning for the Mentally Retarded	
or		
ELD 4322C	Educational Planning for Specific Learning Disabilities	5
or		
EED 4227C	Educational Planning for Behavior Disorders	
EEX 4601	Behavioral Approaches to Classroom Learning I	5
EEX 4611	Behavioral Approaches to Classroom Learning II	5
EEX 4861	Student Teaching	15

*Several of the courses in the undergraduate special education program require field work in the community during daytime hours.

Electives:	**10**
	90

Graduate Programs

The Division of Psycho-Educational Services offers master's degree programs that prepare individuals to teach exceptional children and youth, that extend the skills of teachers of these children, and that train school and community counselors and school psychologists to serve in school and community settings. Emphasis is given to the development of assessment skills, prescriptive programming skills, behavior management techniques, and consultant and group leadership skills.

Program applicants are required to file an application with the Office of Admissions. All applicants must present GRE scores for the Verbal and Quantitative sections, three letters of recommendation (at least one from academic sources and one from work or volunteer experience) and an autobiographical statement. Can-

(Continued)

Psycho-Educational Services

didates are admitted by action of the Division's Graduate Admissions Committee. Criteria for program acceptance include GRE scores, undergraduate grade point average during the junior and senior years, work and volunteer experience, quality and source of letters of recommendation, and the candidate's career aspirations and goals. A combined Verbal-Quantitative GRE score of 1000 and/or GPA of "B" or better during the undergraduate junior and senior years is required for a candidate to be admitted via regular procedures. Where these criteria are not met, candidates may be admitted by special action of the Division's Graduate Admissions Committee and the Dean's Office.

Programs of study are offered in Diagnostic Teaching (Mental Retardation, Behavior Disorders, Specific Learning Disabilities), Counselor Education (School Counseling and Community Counseling) and School Psychology. All programs preparing school personnel are approved by the State of Florida and allow students completing the program to be eligible for certification by the State. Planning work has begun at this time to develop Educational Specialist programs in School and Community Counseling and a Doctoral program in School Psychology on a cooperative basis with other State Universities.

Individuals who do not fulfill one of these requirements can become eligible for admission if they complete all coursework required for a Rank III Certificate or equivalent in any area of education, except for the internship. If admitted to the program in Diagnostic Teaching, after completing these courses, such individuals would fulfill an internship in a setting related to their program designation in Diagnostic Teaching, at a point in their program at which their advisor felt they had completed sufficient coursework and experiences in the education of exceptional students.

Diagnostic Teaching

The major competencies of the diagnostic teacher are an extension of those developed by the student in the undergraduate special education curriculum: a) assessment of learning styles through observation and on-going monitoring techniques; b) application of behavioral approaches to the building, monitoring, and remediation of classroom behavior; c) communication of information concerning children to others within the school, and to parents; d) behavioral change monitoring; e) curriculum planning and innovations; f) teacher and parent consultation; g) supervision of special education units.

The program of study is 45–60 quarter hours, depending upon the student's background. Areas of specialization include: Mental Retardation, Behavior Disorders, and Specific Learning Disabilities.

The program leads to Rank II certification in the state of Florida in either Mental Retardation, Emotional Disturbance, or Specific Learning Disabilities.

LOCATION: Tamiami and North Miami Campuses.

DEGREE: *Master of Science*

In Field Majors

The following program of study is for the student who holds an undergraduate degree in Special Education from Florida International University. A student with an undergraduate major in Special Education from another institution must plan a program with an academic advisor to insure having the entry skills for this program.

		Quarter Hours
General Professional Education:		4
EDF 5481	Analysis & Application of Educational Research	4
Area of Specialization:		28–33
*NOTE: One to four of the following courses depending on the student's preparation:		4–16
EEX 6612	Diagnostic Teaching: Systems & Behavioral Models	4
EEX 6227	Diagnostic Teaching: Educational Assessment	4
EEX 6106	Diagnostic Teaching: Acquisition of Reading & Language Skills	4
EEX 6846	Diagnostic Teaching: Advanced Practicum	4
EEX 6736	Diagnostic Teaching: Consultation & Leadership Skills	4
*NOTE: One of the following three courses depending upon area of certification pursued:		
EMR 6852	Advanced Theory and Practice: Mental Retardation	
or		
ELD 6323	Advanced Theory and Practice: Specific Learning Disabilities	4
or		
EED 6226	Advanced Theory and Practice: Behavior Disorders	
EEX 6863	Supervised Field Experience in Special Education	5
EEX 6001	Professional Problems –Special Ed	2
EEX 6211	Assessment of Behavior I	5
EGC 6616	Program Evaluation in Pupil Personnel Services	4
Electives:		7–13

Out of Field Majors

A student eligible for or holding a Rank III Certificate in other areas of education should consult with an academic advisor for evaluation of entry competencies to the program. If entry competencies cannot be demonstrated either on the basis of course equivalents, work experience, or actual performance tests, the student will be asked to complete one or more of the following courses in addition to those listed above:

		Quarter Hours
EMR 4360	Educational Planning for the Mentally Retarded	
or		
ELD 4322C	Educational Planning for Specific Learning Disabilities	5
or		
EED 4227C	Educational Planning for Behavior Disorders	
EEX 6051	Exceptional Children and Youth	4
EEX 6863	Supervised Field Experience in Special Education	5–10
EGC 6707	Behavior Counseling and Consultation I	5

NOTE: Two to five of the following courses depending on the student's preparation, EEX 6612, EEX 6227, EEX 6106, EEX 6846, EEC 67368-20

Counselor Education

Severely/Profoundly Handicapped

The Division of Psycho-Educational Services is beginning a three year, multi-disciplinary program designed to train paraprofessionals and volunteers to work with the severely/profoundly handicapped. The program is funded by a Bureau of Education for the Handicapped

(Continued)

Psycho-Educational Services

grant. Contact: Division of Psycho-Educational Services.

Institute in the Creative and Performing Arts for the Exceptional

The Institute in the Creative and Performing Arts for the Exceptional is being planned to provide significant arts experiences for exceptional children and adults working with community arts organizations. Research in the arts will be an integral part of the institute's activities. Contact: Dr. David Nathanson, Division of Psycho-Educational Services.

The program in counselor education requires 90 quarter hours of credit. The first 45 hours are largely generic in nature and lead to the development of competencies in individual and group counseling and other social and behavioral change techniques: consultation; program organization and evaluation; and coordination of school and community-centered interventions. Training patterns are more differentiated during the last 45 hours and lead to specialization in one of the following areas: a) counseling in the elementary schools; b) counseling at the secondary school level; c) counseling in higher education; d) vocational counseling; or e) community counseling.

The school counseling program qualifies the student for certification in Guidance in the State of Florida and meets the standards for preparation of counselors recommended by the American Personnel and Guidance Association.

DEGREE: *Master of Science*

		Quarter Hours
*General Professional Education:**		4
EDF 5481	Analysis and Application of Educational Research	4
Area of Specialization:		
EGC 5405	Introduction to Counseling	5
EGC 5305	Educational and Vocational Guidance	5
EGC 6707	Behavioral Counseling and Consultation I	5
EGC 6708	Behavioral Counseling and Consultation II	5
EGC 6725	Human Interaction Laboratory	5
EGC 6726	Human Interaction II	5
EGC 6709**	Human Interaction III	5
EGC 6616	Program Evaluation in Pupil Personnel Services	4
EGC 6203	Measurement and Appraisal in Counseling	4
EGC 6822	Advanced Practica in Counseling and Consultation	5
EGC 6605	Professional Problems –Counselor Ed.	4
EGC 6676	Supervised Field Experience in Counselor Education	15
Electives:		17–22
		90

*The student should consult with the advisor to establish whether additional requirements must be met in general professional education (Fds. of Ed.; Gen. Methods).

**Required only in community counseling.

The student should consult with the academic advisor for guidance in selecting electives appropriate for specialization in school, vocational, or community counseling.

School Psychology

The program in school psychology requires 90 quarter hours of credit and six quarters of graduate study. In general, the competencies to be demonstrated by the student completing this program are derived from the following: behavioral/educational assessment and planning; counseling and child-centered consultation with teachers, parents and agency representatives; staffing, liaison, referral and case management; program development and evaluation; inservice education; administrative consultation; and community development.

DEGREE: *Master of Science*

		Quarter Hours
*General Professional Education:**		4
EDF 5481	Analysis and Application of Educational Research	4

*The student should consult with the academic advisor to establish whether additional requirements must be met in general professional education

Area of Specialization:		69–75
EGC 5405	Introduction to Counseling	5
EGC 6707	Behavioral Counseling and Consultation I	5
EGC 6708	Behavioral Counseling and Consultation II	5
EGC 6725	Human Interaction I	5
EGC 6726	Human Interaction II	5
EEX 6211	Assessment of Behavior I	5
EGC 6255	Assessment of Behavior II	5
EGC 6248	Advanced Practica in Psycho-Educational Assessment and Consultation	5
SPS 6805	Professional Problems in School Psychology I	2
SPS 6806	Professional Problems in School Psychology II	2
EGC 6616	Program Evaluation in Pupil Personnel Services	4
EGC 6678	Supervised Field Experience–School Psychology	15

One to three of the following courses depending upon the student's background:

EEX 6227, EEX 6106, EEX 6846 4–12

Electives:

A student with an undergraduate major in education is encouraged to select electives in the social and behavioral sciences. Other students must meet requirements in general professional education (FDS. of Ed.; Gen. Methods).

Course Descriptions

Definition of Prefixes

EED–Education: Emotional Disorders; EEX–Education: Exceptional Child, Core Competencies; EGC–Education: Guidance and Counseling; ELD–Education: Specific Learning Disabilities; EMR–Education: Mental Retardation; SPA–Speech Pathology and Audiology; SPS–School Psychology.

SPECIAL EDUCATION

EED 4227C Educational Planning for Behavior Disorders (5)(W,SS)

Concepts and skills with various models of curriculum, instruction, and classroom design for individuals with social and emotional adjustment problems. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601.

EED 6226 Advanced Theory and Practice: Behavior Disorders (4)(S,SS)

Major theories in the area of behavior disorders, and skills in the application of these theories to education.

EED 6937 Seminars in Special Education (4, repeatable to 12)(F,W,S,SS)

A. Topics in Mental Retardation B. Topics in Specific Learning Disabilities C. Topics in Behavior Disorders.

(Continued)

Psycho-Educational Services

EEX 3010C Introduction to Exceptional Children and Youth (5)(F,W,SS)
Significant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experiences required.

EEX 3202 Foundations of Exceptionality (5)(W,SS)
Basic concepts in relation to the biological, genetic, psychological and social foundations of handicapping conditions, as they apply to classroom behavior.

EEX 3221 Assessment of Exceptional Children and Youth (5)(SS)
Competencies in assessment of the basic modalities of learning (visual, auditory, haptic and perceptual motor processes), and the language areas of reading, writing, spelling and arithmetic.

EEX 4241 Academic Skills for Exceptional Children, I (5)(F,S)
Competencies in the selection, adaptation and preparation of appropriate instructional materials in arithmetic, art, music, science and social studies, including skill with audio-visual equipment and other multi-media approaches. Prerequisites: EEC 3010C, SPA 3000, EEX 3221, RED 4310.

EEX 4242 Academic Skills for Exceptional Children, II (5)(W,SS)
Skills in a systems approach to individualized instruction in the classroom, including design and implementation of teaching strategies in all academic skill areas. Field experience required. Prerequisites: EEX 4241, EEX 4601.

EEX 4601 Behavioral Approaches to Classroom Learning (5)(F,S)
Concepts and skills for building and modifying social and academic behaviors. Skills in precision teaching, behavior modification, and the functional analysis of behavior.

EEX 4611 Behavioral Approaches to Classroom Learning II (5)(W,SS)
Concepts and skills necessary for the management and maintenance of classroom behavior, including token economies and parent/teacher consultation. Field experience required. Prerequisite: EEX 4601.

EEX 4861 Student Teaching (15)(F,S)
A field experience in a program for exceptional children, demonstrating competencies learned throughout the program.

EEX 4905 Individual Study in Special Education (1-10)(F,W,S,SS)
Concepts or competencies contracted for between an undergraduate student and an instructor in accordance with the student's individual needs.

EEX 6051 Exceptional Children and Youth (4)(F,SS)
Significant concepts in relation to the learning and adjustment problems of exceptional children and youth. Field experience and graduate project required.

EEX 6106 Diagnostic Teaching: Acquisition of Language and Reading Skills (4)(W,SS)
Concepts in acquisition and development of language and reading skills.

EEX 6227 Diagnostic Teaching: Educational Assessment (4)(F,W,SS)
Skill in application of assessment theory to classroom diagnosis and to the development of instructional objectives.

EEX 6612 Diagnostic Teaching: Systems and Behavioral Models (4)(F,SS)
Skills in the application of diagnostic data to various instructional strategies and behavioral models.

EEX 6736 Diagnostic Teaching: Consultation and Leadership Skills (4)(S,SS)
Skills in parent consultation and education.

EEX 6846 Diagnostic Teaching: Advanced Practicum (4)(S,SS)
Application of diagnostic teaching models to individualized, remedial and compensatory instructional programs.

EEX 6863 Supervised Field Experience in Special Education (5–15)(F,W,S,SS)
Demonstration of the full range of competencies in diagnostic teaching learned throughout the program. Internship placements include a variety of field settings.

EEX 6906 Individual Study in Special Education (1-10)(F,W,S,SS)
Concepts or competencies contracted for by graduate students with an instructor.

EEX 6927 Workshop in Special Education (1-10)(VAR)
Selected competencies in special education, developed in short-term, intensive workshops.

ELD 4322C Educational Planning for Specific Learning Disabilities (5)(W,SS)
Concepts and skills with various models of curriculum, instruction, and classroom designs for individuals with specific learning disabilities. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601.

ELD 6323 Advanced Theory and Practice: Specific Learning Disabilities (4)(S,SS)
Major concepts in the area of specific learning disability, and skills in the application of these concepts to education.

EMR 4360 Educational Planning for the Mentally Retarded (5)(W,SS)
Concepts and skills used in planning educational, prevocational and vocational programs for the mentally retarded. Laboratory experiences required. Prerequisites: EEX 4241, EEX 4601.

EMR 6852 Advanced Theory and Practice: Mental Retardation (4)(S,SS)
Major concepts in the area of mental retardation, and skills in the application of these concepts to education.

SPA 3000 Introduction to Language Development and Communication Disorders (5)(F,W,SS)
Skills in assessing and classroom programming for language development and for various speech and language disorders of children.

PUPIL PERSONNEL SERVICES

EEX 6001 Professional Problems—Special Ed. (2)(F)
Orientation to profession of special education.

EEX 6211 Assessment of Behavior I (5)(F,W,SS)
Basic concepts in assessment theory. Competencies in using a variety of standardized tests in assessing and writing educational prescriptions for children with disorders in visual, auditory and haptic processing, in language or integrative systems.

EGC 5305 Educational and Vocational Guidance (5)(W,SS)
Concepts and skills pertaining to vocational development, information systems, career education programs, educational-vocational counseling, and socio-psychological influences on career development.

EGC 5405 Introduction to Counseling (5)(F,W,SS)
Major theoretical concepts in counseling. Competencies in relationship-building, interviewing, role-playing, simulation and micro-counseling.

EGC 6203 Measurement and Appraisal in Counseling (4)(S,SS)
Concepts and skills related to the use of tests and other appraisal procedures in counseling. Particular emphasis on career and vocational

(Continued)

Subject Specializations

choice processes. Laboratory experiences included.

EGC 6248 Advanced Practica: Psycho-Educational Assessment and Consultation (5)(S)
Advanced competencies in psycho-educational assessment.

EGC 6255 Assessment of Behavior II (5)(W)
Concepts and skills in the assessment of intelligence, with a particular emphasis on the problems of assessing the mentally retarded, the gifted, and members of minority groups. Prerequisite: EEX 6211.

EGC 6605 Professional Problems—Counselor Education (4)(W,S)
Competencies in regard to the development of major role and service models and the application of budgeting systems, legal and ethical standards in a psycho-educational setting.

EGC 6616 Program Evaluation in Pupil Personnel Services (4)(F,S)
Evaluation skills in the student's area of specialization, including competencies in designing evaluation proposals and conducting an actual program evaluation. Prerequisite: EDF 5481.

EGC 6676 Supervised Field Experience in Counselor Education (15)
Demonstration of the full range of competencies learned throughout the program in Counseling. Internship placements include a variety of field settings.

EGC 6678 Supervised Field Experience in School Psychology (15)
Demonstration of the full range of competencies learned throughout the program in School Psychology. Internship placements include a variety of field settings.

EGC 6707 Behavioral Counseling and Consultation (5)(F,W,SS)
Concepts and skills in using behavior modification: functional analysis of behavior, precision teaching, token economies, contingency contracting, parent and/or teacher consultation.

EGC 6708 Behavioral Counseling and Consultation II (5)(W,S)
Extended laboratory experiences stressing the development of skills in behavioral approaches to individual and group counseling, consultation, parent education, and in-service training. Prerequisite: EGC 6707, or equivalent.

EGC 6709 Human Interaction III: Organizational Consultation (5)(S)
Theoretical concepts and skills in organizational development and change. Competencies in systems diagnosis and assessment, consultation, agenda setting, team building, decision-making and feedback. Prerequisite: EGC 6726.

EGC 6725 Human Interaction I: Group Process Laboratory (5)(F,W)
Concepts, research and theory relative to small group process. Students will participate in small face-to-face task groups, with an emphasis on developing competencies in diagnosis and intervention in small groups.

EGC 6726 Human Interaction II: Analysis of Group Participation (5)(W,S)
Participation in an on-going group with attention given to examination of processes of small group phenomena such as interpersonal communication, norms, decision-making, leadership, authority and membership. Prerequisite: EGC 6725.

EGC 6822 Advanced Practica in Counseling and Consultation (5)(W)
Advanced competencies in counseling and consultation.

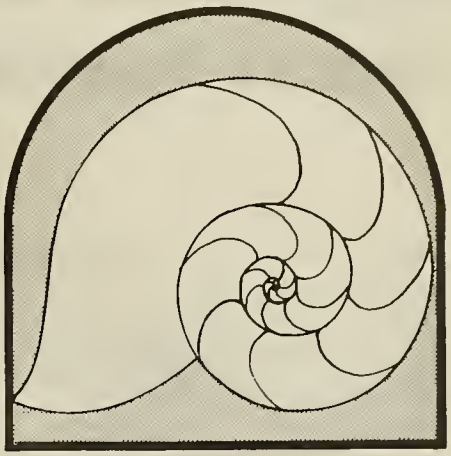
EGC 6905 Individual Study in Pupil Personnel Services (1–10)(F,W,S,SS)
Competencies contracted for between a student and an instructor in accordance with the student's individual needs.

EGC 6925 Workshop in Psycho-Educational Services (1-10)(VAR)
Selected competencies in counselor education or school psychology, developed in short-term, intensive workshops.

EGC 6936 Seminars in Pupil Personnel Services (4, repeatable to 12)(F,W,S,SS)
Special topics in relation to counseling or school psychology.

SPS 6805 Professional Problems in School Psychology I (2)
Competencies in regard to the development, role and function of school psychologists. General orientation and legal issues included.

SPS 6806 Professional Problems in School Psychology II (2)
Competencies in effective role development in a multi-cultural, multi-ethnic environment. Effective consultation practices, ethical standards, and current issues included.



Division of Subject Specializations

Judy A. Blucker, *Associate Professor and Chairperson, Physical Education*
Ida F. Chadwick, *Associate Professor, Physical Education*
Jack Llewellyn, *Associate Professor, Physical Education*
Richard Lopez, *Assistant Professor, Physical Education*
Luis A. Martinez, *Associate Professor, Science Education*
C. Edwin McClintock, *Associate Professor, Mathematics Education*
George B. Pearson, *Professor, Physical Education*
Clement Pennington, *Assistant Professor, Art Education*
Robert Shostak, *Professor, English Education*
John J. Staczek, *Associate Professor, Modern Language Education/TESOL*
Robert F. Testa, *Associate Professor, Music Education*
Jan L. Tucker, *Professor, Social Studies Education*
Michael J. Wagner, *Associate Professor, Music Education*

The Division offers bachelor's degree programs for the preparation of teachers in secondary subject areas and teachers of art, music, and physical education in grades 1–12. It also offers master's degree programs designed for the continued professional development of teachers.

Unlike traditional programs in secondary education, which emphasize course completion as a sufficient condition for awarding a degree, the programs of the Division emphasize demonstrated performance in specific teaching skills as the main criterion for awarding a degree.

Undergraduate Programs

A student enrolled in the Division may pursue the following programs:

General: Grades 1–12
Art Education
Music Education
Physical Education

(Continued)

Subject Specializations

Secondary Education: Grades 7–12

Biology Education	Mathematics Education
Chemistry Education	Modern Language Education
English Education	Physics Education
History Education	Social Studies Education
Health Education	

Each student major in the Division, after being admitted to the University, is assigned an advisor in the teaching field who will assist the student in constructing a program of study. The program of study must comply with the University's degree requirements and will reflect the career goals of the student. Upon completion of the work specified in the program of study, the student is awarded a *Bachelor of Science* degree with a major in a specific subject matter area, and qualifies for the appropriate Rank III certification in the State of Florida.

All courses taken in the College of Arts and Sciences which are to be applied to an Education major must be evaluated using the letter grade system.

Students wishing to obtain a second major or second degree in the College of Arts and Sciences should consult an advisor in the field of study they wish to pursue.

Student Teaching and Laboratory Experiences

Most courses offered by this Division require observation and participation in selected schools. The course descriptions will identify those courses which require such in-school experiences.

The student teaching assignments are fulfilled in designated field centers under the direction of classroom teachers and University faculty. This experience is on a full-time basis for a complete quarter. Permission to student teach will be contingent upon completion of all other requirements specified in the program of study. Students may be assigned to student teach during the Winter or Spring Quarter of the senior year. There is no student teaching in the Summer Quarter.

Application for student teaching is the responsibility of the student. Necessary forms may be obtained from the Office of Student Personnel Services in the School of Education, and should be returned to that office early in the quarter following completion of 135 quarter hours of credit and no later than two quarters prior to the time of registration for student teaching.

Art Education: Grades 1–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 1) An Associate of Arts degree in art, or (a) Art History Survey (6 semester hours) and (b) Basic and Figure Drawing (6 semester hours) and (c) Two and Three Dimensional Design (6 semester hours); and 2) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours	
Subject Matter Specialization:			**45**
ARH 4470	Contemporary Art, Art History Elective	10	
ART 3510C	Painting	5	
ART 3702C	Sculpture	5	
ART 3150C	Jewelry and Metals	5	
ART 3401C	Printmaking	5	
ART 3601C	Photography	5	
ART 3111C	Ceramics	5	
Art Elective		5	
Professional Education:			**45**
EDF 3827	Schooling in America	5	
EDG 3321	General Teaching Laboratory I	5	
EDG 3322	General Teaching Laboratory II	5	
Reading Requirement:			
RED 4335	Special Teaching Laboratory: Reading.	5	

Special Methods and Student Teaching: A student must complete the 10 quarter hours of foundations courses, and all core courses before enrolling in 4000 level special methods courses.

ARE 4316 and ARE 4341 must be taken in sequence before ARE 4940.

ARE 4316	Special Teaching Laboratory: Art in Grades K-6	5

(minimum prerequisite or corequisite of 30 hours required in subject matter specialization)

ARE 4341	Special Teaching Laboratory: Art in Grades 7–12	

(minimum prerequisite or corequisite of 30 hours required in subject matter specialization) 5

ARE 4940	Student Teaching in Art	15
		90

Music Education: Grades 1–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: An Associate of Arts degree in Music or the following recommended courses: applied, 12 quarter hours; history, 6 quarter hours; organizations, 6 quarter hours; techniques secondary instruments, 6 quarter hours; theory, 18 quarter hours; sight-singing, 6 quarter hours; Foundations in Education, 10 quarter hours. If Foundations in Education requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours	
Subject Matter Specialization:			**41**
Applied Music (Five quarters; ½ hour lessons on major instrument each quarter)		5	
Basic Conducting		2	
Beginning Instrumental or Choral		2	
Form and Analysis		5	
Counterpoint		5	
Guitar		2	
Twentieth Century Music History		5	
Orchestration or Choral Techniques		5	
Organizations (5 quarters)		10	
Professional Education:			**45**
EDF 3827	Schooling in America	5	
EDG 3321	General Teaching Laboratory I	5	
EDG 3322	General Teaching Laboratory II	5	
Reading Requirement:			
RED 4335	Special Teaching Laboratory: Reading	5	

Special Methods and Student Teaching: A student must complete the 10 quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for MUE 4341 and 4940 in consecutive quarters.

MUE 3332	Special Teaching Laboratory I: Music	5
MUE 4341	Special Teaching Laboratory II: Music (K-12)	

(Minimum prerequisite or corequisite of 30 hours required in subject matter specialization) 5

MUE 4940	Student Teaching (Elementary & Secondary)	15

(Continued)

Subject Specializations

Electives:	4
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.	
	90

Biology Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 12 quarter hours (8 semester hours) of biology; 12 quarter hours (8 semester hours) of general chemistry; 12 quarter hours (8 semester hours) of general physics; mathematics through analytical geometry; and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		48
Genetics		5
Biochemistry		7
Molecular Biology		7
Developmental Biology		5
Electives in Biology*		10
Organic Chemistry		7
Quantitative Analysis		7
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading.	5
Special Methods and Student Teaching:		
A student must complete ten (10 quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and LAE 4942 in consecutive quarters.		
SCE 4330	Special Teaching Laboratory: Science (minimum prerequisite or corequisite of 30 hours required in subject matter specialization)	5
SCE 4944	Student Teaching	15
Electives:		2
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.		
		90

*BSC 3023, 3033; 3253; OCB 3010; BOT 3823; PCB 3703; BSC 3913 and 4914 are not applicable to this requirement.

Chemistry Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 12 quarter hours (8 semester hours) of general chemistry; 12 quarter hours (8 semester hours) of general physics; mathematics through Calculus I; and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

Recommended Courses: Organic Chemistry

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		38–40
Organic Chemistry I and II		10
Organic Chemistry Laboratories		4
Quantitative Analysis and Laboratories		7
Physical Chemistry and Laboratory		7
Electives in Chemistry		5–7
Calculus II		5
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EEG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading.	5
Special Methods and Student Teaching:		
A student must complete ten (10 quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and 4942 in consecutive quarters.		
SCE 4330	Special Teaching Laboratory: Science (minimum prerequisite or corequisite of 25 hours required in subject matter specialization)	5
SCE 4944	Student Teaching	15
Electives:		10–12
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.		
		90

English Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: two courses in freshman English; two courses beyond freshman English in literature; one course in oral interpretation; one course in advanced composition; and Foundations of Education (10 quarter hours). If the required courses beyond freshman composition are not completed they will be included in the student's program in addition to regular upper division requirements. If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		45
ENG 3500	Introductory Linguistics	5
ENG 4555	Modern Grammars (prerequisite ENG 3500)	5
LAE 4464	Adolescent Literature	5
Literary Criticism		5
Shakespeare		5
Communications electives		10
Literature electives		10
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading.	5
A student must complete ten (10) quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for LAE 4335 and LAE 4942 in consecutive quarters.		
LAE 4335	Special Teaching Laboratory:	

(Continued)

Subject Specializations

English (minimum prerequisite or corequisite of 30 hours required in subject matter specialization) 5
LAE 4942 Student Teaching 15
Electives: 5
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.

90

Health Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education, (10 quarter hours). Completion of lower division Health Education program, Personal Health.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		40
HUN 3122	Nutrition and Culture	5
HSC 3300	Health & Social Service Delivery Systems	5
APB 3253	Biological Basis of Human Sexuality	
or		
SOP 3772	Psychology of Sexual Behavior	5
MCB 3013	General Microbiology	
or		
MCB 3000	Introduction Microbiology	5
SOP 3932	Psychology of Drug Abuse	5
ZOO 3731C	Human Anatomy	
or		
PCB 3700	Physiology	5
HES 4001	Community Health	5
HES 4160	Critical Issues in Health Education	5
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	Teaching Lab I	5
EDG 3322	General Teaching Lab II	5
RED 4335	Special Teaching Lab: Reading	5
HES 4303L	Special Teaching Lab: Health Education	5
HES 4940	Student Teaching	15
Electives: (with prior approval of advisor)		10
		90

History Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science or sociology). 3) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		40
1. History 3001 Introduction to History		5
2. U.S. History at 3000, 4000 or 5000		10
3. History other than U.S.		20
4. U.S. Government (POS 3044)		5
Professional Education:		15
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		5
RED 4335	Special Teaching Laboratory: Reading.	5
Special Methods and Student Teaching:		20

A student must complete 10 quarter hours of foundations courses and all core courses before enrolling in 4000 level methods courses. A student must enroll for SSE 4384C and SSE 4942 in consecutive quarters, in either a fall-winter or a winter-spring quarter sequence.

SSE 4384C	Special Teaching Laboratory: Social Studies	5
SSE 4942	Student Teaching	15
Electives:		10

Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.

It is recommended that the student consider a double major which combines a major in history education with a major in social studies, international relations, political science, economics, anthropology, sociology or history. The student must consult with the history education advisor about these requirements.

90

Mathematics Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Trigonometry. Analytic geometry. Calculus (at least one term). Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		35

35 quarter hours beyond calculus, including at least 10 quarter hours in probability and statistics, and 5 quarter hours in computer science and geometry.

Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading	5

Special Methods and Student Teaching:

A student must complete ten ((10) quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for MAE 4333C and MAE 4942 in consecutive quarters.

MAE 4333C Special Teaching Laboratory:
Mathematics (minimum prerequisite or corequisite of 30 hours required in subject matter specialization) 5
MAE 4942 Student Teaching 15
Electives: 15
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.

90

Modern Language Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Four semesters of elementary and intermediate modern language (may be waived, at the discretion of the advisor, for native speakers of the

(Continued)

Subject Specializations

target language); and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		45
Phonetics or Contrastive Phonology		5
Intro. Linguistics or Linguistics in Target Language		5
Civilization		5
Syntax/Composition		5
Literature in Target Lanauage		10
MOL Electives		15
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading	5
Special Methods and Student Teaching:		
A student must complete the 10 quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for FLE 4375 and FLE 4942 in consecutive quarters.		
FLE 4375	Special Teaching Laboratory: Modern Languages (minimum prerequisite or corequisite of 20 hours required in subject matter specialization).	5
FLE 4942	Student Teaching	15
Electives:		5
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.		
		90

Physical Education: Grades 1–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours). Completion of lower division Physical Education program, Personal Health, skill courses in dance, gymnastics, and aquatics, plus two or more activities from both individual sports and team sports. A basic mathematics course and additional physical activity courses are highly recommended.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization		40
PET 3310	Kinesiology	5
PET 3360	Exercise Physiology	5
PET 3461C	Physical Education in the Elementary School	5
PET 3202	Physical Education in the Secondary School	5
PET 3640C	Adapted Physical Education	5
PCB 3700	Foundations of Human Physiology	5
PET 4230C	Motor Learning	5
PET 4510	Evaluation in Physical Education	5
The student has the option of selecting 10 quarter hours of course work in the elementary emphasis or secondary emphasis areas.		
Electives: Elementary Physical Education Emphasis		10
PET 4430	Physical Education for Primary Grades	5
PET 4433	Physical Education for Intermediate Grades	5
or		
Electives: Secondary Physical Education Emphasis		10
PEO 4014C	Coaching Sports*	5
PET 4622C	Athletic Injuries*	5
SOP 3932	Psychology of Drug Abuse	5
HES 4001	Community Health	5
HES 4160	Critical Issues in Health	5
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Lab I	5
EDG 3322	General Teaching Lab II	5
RED 4335	Special Teaching Lab: Reading	5
PET 4450L	Special Teaching Lab: Physical Education	5
PET 4945L	Student Teaching	15
		90

*Student must elect one of these two courses.

Physics Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 12 quarter hours of general physics; 12 quarter hours (8 semester hours) of general chemistry; mathematics through Calculus II; and Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be taken in addition to the 90 quarter hours required in the student's upper division program.

Remarks: Linear algebra, a prerequisite for multi-variable calculus (section 1 below) may be taken at the lower division or at Florida International.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		41
Physics 3040, 3041, 3042		15
Junior Physics Laboratory 3040L–3042L		6
Modern Physics		10
Electives in Physics		5
Multivariate Calculus		5
Professional Education:		40
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		
RED 4335	Special Teaching Laboratory: Reading.	5
Special Methods and Student Teaching:		
A student must complete ten (10) quarter hours of foundations courses and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SCE 4330 and SCE 4942 in consecutive quarters.		
SCE 4330	Special Teaching Laboratory: Science (minimum prerequisite or corequisite of 25 hours required in subject matter specialization)	5
SCE 4944	Student Teaching	15
Electives:		9
Sufficient number of hours to accrue to a total of 90 quarter hours at Florida International University.		

Social Studies Education: Grades 7–12

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: 1) Two courses in history. 2) One course in the social sciences beyond freshman social science core (select from anthropology, economics, geography, political science or sociology). 3) Foundations of Education (10 quarter hours). If foundations requirements are not met at the lower division, they must be

(Continued)

Subject Specializations

taken in addition to the 90 quarter hours required in the student's upper division program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Subject Matter Specialization:		30*
History		10
Political Science (POS 3044)		5
Geography (GEA 3000)		5
Economics		5
Anthropology or Sociology		5
Professional Education:		15
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
Reading Requirement:		5
RED 4335	Special Teaching Laboratory: Reading.	5
Special Methods and Student Teaching:		20

A student must complete ten (10) quarter hours of foundation courses, and all core courses before enrolling in 4000 level special methods courses. A student must enroll for SSE 4384C and SSE 4942 in consecutive quarters, in either a fall-winter or a winter-spring quarter sequence.

SSE 4384C	Special Teaching Laboratory: Social Studies	5
SSE 4942	Student Teaching	15
Electives:		20
		90

*A minimum of 65 quarter hours at the lower and upper divisions combined must be completed in the social studies subject matter specialization for certification. Electives must include sufficient quarter hours in United States history (10), history other than United States (15), political science (10), geography (10), economics (10), anthropology (5) and sociology (5) to meet social studies certification requirements. It is recommended that the student consider a double major which combines a major in social studies with a major in history, history education, international relations, political science, economics, anthropology or sociology. The student must consult with the social studies advisor about these requirements.

Graduate Programs

Master's programs are offered by the Division in the following specialized areas:

Art Education
English Education
Health Education
Mathematics Education
Modern Language Education
Music Education
Physical Education
Science Education
Social Studies Education
TESOL (Teaching English to Speakers of Other Languages)

A student must file a program of study with the advisor. The program of study must comply with the general master's degree requirements and reflect the career goals of the student.

Upon completion of the program, the student is awarded the Master of Science degree and qualifies for Rank II certification in the State of Florida.

Requirements for admission to all of these programs except TESOL are: (1) possession of a certificate or equivalent in the area selected, (2) satisfactory scholastic aptitude as determined by the Graduate Admission standards, (3) evidence of satisfactory record in the teaching field.

Requirements for admission to the TESOL master's program are: (1) satisfactory scholastic aptitude as determined by the Graduate Admissions standards and (2) evidence of a satisfactory record in a teaching or professional field.

A typical program of study consists of 45 quarter hours of course work. Generally, ten quarter hours of graduate study from another accredited college or university may be transferred if applicable to the student's program.

All courses taken in the College of Arts and Sciences which are to be applied to an Education Major must be evaluated using the letter grade system.

Note: If students have not met the reading requirement for certification, they will be required to take RED 6337 (See page EDU 2).

Art Education

DEGREE: *Master of Science*

		Quarter Hours
Education, including Art Education:		20
EDF 5481	Analysis and Application of Educational Research	4
ARE 6140	Curriculum and Instruction in Art	4
Select one of the following:		
ARE 5251	Art for Exceptional Children and Youth	4
EDE 6205	Curriculum Design for Childhood Educ.	
ESE 6215	Secondary School Curriculum	
ARE 6262	Organization and Coordination of School and Community Art Programs	4
ARE 6706	Seminar in Art Education: Contemporary Issues and Research	4
Teaching Field:		21

Five graduate art courses, including one art history:
Art History (5)
Studio Art (16)
(4 quarter hours credit for each studio course)

Electives:		8
		49

English Education

DEGREE: *Master of Science*

		Quarter Hours
Education:		16
EDF 5481*	Analysis and Application of Educational Research	4
LAE 6339*	Teaching English in the Secondary School	4
ESE 6215	Secondary School Curriculum	4
LAE 6935	Seminar in English Education	4
*These courses to be taken in sequence		
Teaching Field: English		25
Electives:		4
		45

Mathematics Education

DEGREE: *Master of Science*

		Quarter Hours
Education:		16
EDF 5481	Analysis and Application of Educational Research	4
MAE 6336	Teaching Mathematics in the Secondary School	4
MAE 6899	Seminar in Mathematics Education	4
ESE 6215	Secondary School Curriculum	4

(Continued)

Subject Specializations

Teaching Field: Mathematics 20
Electives: In Education and/or Mathematics 9
45

Music Education

DEGREE: *Master of Science*

		Quarter Hours
Education:		16
ESE 6215	Secondary School Curriculum	4
or		
EDE 6205	Curriculum Design for Childhood Education	
EDF 5481	Analysis and Application of Educational Research	4
MUE 6349	Methodology of Music Teaching	4
MUE 6938	Seminar in Music Education	4
Teaching Field: Courses in music including:		20
MUH 5375	Twentieth Century Music	4
MUT 5325	Arranging	4
MUG 5105	Advanced Conducting	2
Electives:		9
		45

Science Education

DEGREE: *Master of Science*

		Quarter Hours
Education:		16
EDF 5481	Analysis and Application of Educational Research	4
SCE 6635	Teaching Science in the Secondary School	4
ESE 6215	Secondary School Curriculum	4
SCE 6933	Seminar in Science Education	4
Teaching Field:		20
Biology or Chemistry or Physics		
or		
One course in each of the following areas: Biology, Chemistry, Physics (For Junior High Science Teachers)		
Electives:		9
		45

Social Studies Education

DEGREE: *Master of Science*

		Quarter Hours
Education:		16
SSE 6633	Teaching Social Studies in the Secondary School	4
ESE 6215	Secondary School Curriculum	4
EDF 5481	Analysis and Application of Educational Research	4
SSE 6939	Seminar in Social Studies Education	4
Teaching Field: Graduate level social science and history		20
Electives: In Education and/or teaching field		9
		45

Health Education

DEGREE: *Master of Science*

		Quarter Hours
Professional Education		16
EDF 5481	Analysis and Application of Educational Research	4
EDG 5325	Analysis of Teaching	4
EDF 5216	Affective Learning in the Classroom	4
RED 6337	Reading in the Secondary Schools	4
Area of Specialization:		21
HES 5205	Current Concepts in Community Health	4
HES 5327	Health Curricula in Public Schools	4
HES 5326	Educational Approaches to Health Problems	4
CLP 5185	Current Issues in Mental Health	
or		
SOC 5255	Sociology of Mental Health	5
HUN 5890	Recent Research in Nutrition	
or		
HUN 5611	Nutrition Education in the Community	4
Electives:		8
DEP 4464	Psychology of Aging	5
		45

Modern Language Education

DEGREE: *Master of Science*

		Quarter Hours
Professional Education:		16
EDF 5481	Analysis and Application of Educational Research	4
ESE 6215	Secondary School Curriculum	4
FLE 6805	Teaching Second Language in the Secondary School	4
FLE 6938	Seminar in Second Language Education	4
Area of Specialization:		25

Students will choose, in consultation with the advisor, a total of 25 hours from among the following courses in the Departments of English, Modern Languages, and Psychology:

LIN 4400	Applied Linguistics (or graduate equivalent)
ENG 5907	Independent Study
LIN 3400	Applied Linguistics (or graduate equivalent)
LIN 5701	Psychology of Language (or graduate equivalent)
LIN 4710	Language Acquisition (or graduate equivalent)
FRW 5150	Comparative Studies
FRW 5395	Genre Studies
FRW 5934	Special Topics in Language/Literature
FRW 5938	Graduate Seminar
SPW 5155	Comparative Studies
SPW 5391	Genre Studies
SPW 5934	Special Topics in Language/Literature
SPW 5936	Graduate Seminar
LIN 5625	Studies in Bilingualism
LIN 5934	Special Topics in Linguistics

Field Component 5

The remaining five (5) quarter hours will consist of a supervised field experience in the teaching of one of the modern languages. The field experience

(Continued)

Subject Specializations

may be arranged according to one of the following options:
(a) Dade County Public Schools;
(b) Private schools;
(c) adult or community college education:
(d) adjunct teaching at Florida International University
All arrangements for field experience must be approved by the advisor.

TOTAL 46

Physical Education

DEGREE: *Master of Science*

		Quarter Hours
Professional Education		8
EDF 5481	Analysis and Application of Educational Research	4
RED 6337	Reading in the Secondary School	4
Area of Specialization:		28
PET 5216	Sports Psychology	4
PET 5238C	Perceptual Motor Learning	4
PET 5256C	Sociology of Sport	4
PET 5366C	Sports Medicine	4
PET 5438	Physical Education Curriculum in Elementary School	4
PET 6353	Survey of Research in Physical Education	4
PET 6932	Seminar in Physical Education	4
Electives:		9
PET 6925**	Workshop in Physical Education	5
PET 4510*	Evaluation in Physical Education	5
PET 5906	Individual Study	1–5
EDG 6250	Curriculum Development	4
ESE 6215	Secondary School Curriculum	4
EDF 5216	Affective Learning	4
EME 5315	Instructional Media	4
EDG 5325	Analysis of Teaching	4
or		
an elective approved in advance by student's advisor		
		45

*Required of all graduate students if they have *not* taken an undergraduate evaluation class.
**Only one workshop can be counted toward 45 hours of degree work.

Teaching English to Speakers of Other Languages (TESOL)

DEGREE: *Master of Science*

		Quarter Hours
Professional Education:		16
EDF 5481	Analysis and Application of Educational Research	4
ESE 6215	Secondary School Curriculum	
or		
EDE 6205	Curriculum Design for Childhood Education	4
FLE 6895	Special Methods of TESOL	4
FLE 6938	Seminar in Second Language Education	4
Area of Specialization:		25

Students in the M.S. in TESOL will choose, in consultation with the advisor, a total of 25 hours from among the following courses in the Departments of English, Modern Languages, and Psychology:

ENG 4555	Modern English Grammar (or graduate equivalent)
LIN 4400	Applied LInguistics (or graduate equivalent)
ENG 5907	Independent Study
LIN 3400	Applied Linguistics (or graduate equivalent)
LIN 4226	Contrastive Phonology (or graduate equivalent)
LIN 4333	Contrastive Morphology (or graduate equivalent)
LIN 4418	Problems in Language Learning (or graduate equivalent)
LIN 5625	Studies in Bilingualism
LIN 5934	Special Topics in Linguistics
LIN 5701	Psychology of Language (or graduate equivalent)
LIN 4710	Language Acquisition (or graduate equivalent)

Field Component: 5
The remaining five (5) quarter hours will consist of a supervised field experience in the teaching of English to speakers of other languages. The field experience may be arranged according to one of the following options:
(a) ESOL in Dade County Public Schools;
(b) ESOL in adult and/or community college education;
(c) ESOL in private enterprise;
(d) Intensive English at Florida International University
All arrangements for field experience must be approved by the advisor

TOTAL 46

Course Descriptions

Definition of Prefixes
ARE–Art Education; ESE–Education Secondary; FLE–Foreign Language Education; LAE–Language Arts & English Education; MAE–Mathematics Education; MUE–Music Education; SCE–Science Education; SSE–Social Studies Education; PET–Physical Education; HES–Health Education.

ART EDUCATION

ARE 4316 Special Teaching Laboratory: Art in Grades K–6 (5)(F,S)
Development of instructional skills, techniques, and strategies for teaching art in the elementary school. Laboratory and field participation required. Prerequisites: EDF 3827, EDG 3321, EDG 3322. Minimum prerequisite or corequisite of 30 hours required in subject matter specialization.

ARE 4341 Special Teaching Laboratory: Art in Grades 7–12 (5)(F,W)
Development of instructional skills, techniques and strategies for teaching art in the junior and senior high school. Laboratory and field participation required. Prerequisites: EDF 3827, EDG 3321, EDG 3322; ARE 4316. Minimum prerequisite or corequisite of 30 hours required in subject matter specialization.

ARE 4940 Student Teaching in Art (15)(W,S)
Supervised teaching in an elementary and secondary school. Prerequisites: EDG 3321, 3322; ARE 4316, 4341; RED 4335, and 30 quarter hours of the course work required in art.

(Continued)

Subject Specializations

ARE 5251 Art for the Exceptional Child (5)(W,SS)
Development of instructional art skills, techniques, and strategies as related to the exceptional child. Observation and field participation required.

ARE 5905 Directed Study in Art Education (1–5)
Individual investigation and research in one or more areas of art education. Prerequisite: consent of professor.

ARE 6140 Curriculum and Instruction in Art (4)(W)
Examination of theoretical bases of curriculum development in art education. Analysis of objectives, content, methods and materials for art instruction in the elementary, junior and senior high school. Prerequisite: EDF 5287.

ARE 6262 Organization and Coordination of School and Community Art (4)(F,SS)
Procedures for the organization, coordination and evaluation of school, community, and in-service art programs, with particular attention to the urban multi-cultural setting.

ARE 6706 Seminar in Art Education: Contemporary Issues and Research (4)(S)
Examination of current issues and review of research in art education literature. Delineation and application of an individual research problem. Prerequisite: EDF 5481.

ARE 6926 Workshop in Art Education (3–5)
Production and application of materials and techniques in art education, in a laboratory or field setting.

MUSIC EDUCATION

MUE 3332 Special Teaching Laboratory I (5)(W)
Development of instructional skills, techniques, and strategies for school music performance organizations through laboratory and field experiences. Prerequisites: EDF 3827, EDG 3321, 3322.

MUE 4341 Special Teaching Laboratory II (5)(W)
Field-based methods, materials and instructional skills course, which prepares students for internship in an elementary and secondary school setting. Prerequisites: EDF 3827, EDG 3321, EDG 3322, MUE 3332.

MUE 4940 Student Teaching (15)(S)
Supervised teaching in an elementary school (5 weeks) and a secondary school (5 weeks). Prerequisites: EDF 3827, EDG 3321, EDG 3322; MUE 3332, MUE 4341; RED 4335, and 30 quarter hours of the coursework required in music.

MUE 5907 Directed Study in Music Education (1–5)(ARR)
Individual investigation in one or more areas of music education.

MUE 5928 Workshop in Music (1–5)(ARR)
Applications of materials and techniques in music in a laboratory or field setting.

MUE 6349 Methodology of Music Teaching (4)(W,SS)
Analysis of methods, programs and materials for teaching music in the public schools, and development of music pedagogy skills.

MUE 6925 Workshop in Music Education (1–5)(ARR)
Applications of materials and techniques in music education in a laboratory or field setting.

MUE 6938 Seminar in Music Education (4)(F,S)
Seminar in music programs in the United States and other countries, and current issues and problems facing the music educator.

SECONDARY EDUCATION: GRADES 7–12

ESE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisites: Consent of instructor.

ESE 6215 Secondary School Curriculum (4)(W,SS)
Examination of programs, trends, and developments in curriculum and instruction in the secondary school. Consideration and evaluation of innovations.

ESE 6425 Research in Secondary Education (1–4)(ARR)
Examination and evaluation of research studies in secondary education. Prerequisite: At least one course in research methods or equivalent competency. (Determination of equivalent competency will be made by the instructor.)

ESE 6925 Workshop in Secondary Education (3–5)(ARR)
Production and application of materials and techniques in a laboratory or field setting. Prerequisite: Consent of instructor.

ESE 6935 Seminar in Secondary Education (1–4)(ARR)
Analysis of selected problems in secondary education.

ESE 6947 Supervised Field Experience (5–15)(ARR)
Field work in an educational institution or organization. Prerequisite: consent of Chairperson of the Division.

FLE 4375 Special Teaching Laboratory: Modern Languages (5)(W)
Development of instructional skills, techniques, and strategies for teaching modern languages in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 20 hours in subject matter specialization.

FLE 4942 Student Teaching (15)(S)
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4335, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

FLE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

FLE 6805 Teaching Second Language in the Secondary School (4)(W–SS)
A modern study of language learning and teaching from the theoretical and practical points of view, including the evaluation and development of techniques and materials for second language teaching. Prerequisites: LIN 3010 or ENG 3500 or equivalent.

FLE 6895 Special Methods of TESOL (4)(F)
Investigation of modern techniques for the teaching of oral and written communication in English to non-native speakers of English, including the evaluation and development of materials for English to Speakers of Other Languages.. Prerequisites: LIN 3010 or ENG 3500 or equivalent.

FLE 6925 Workshop in Second Language Education (1–5)(ARR)
Production and application of materials and techniques in second language education in a laboratory or field setting.

FLE 6938 Seminar in Second Language Education (4)(S)
Advanced study and research on current topics and issues in the field of second language education. Variety of topics to include language testing, language proficiency, language and society, bilingual/bicultural education, and error analysis and the language learner.

LAE 4335 Special Teaching Laboratory: English (5)(W)
Development of instructional skills, techniques, and strategies for teaching English in the junior and senior high school. Prerequisites: EDF

(Continued)

Subject Specializations

3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 25–30 hours in subject matter specialization.

LAE 4464 Experiencing Adolescent Literature in the Junior-Senior High School (5)(F)
An examination of the most familiar types of literature found in the secondary school English curriculum today; and the development of strategies for organizing and providing a variety of literary experiences of students who differ in intellectual abilities and literary tastes.

LAE 4942 Student Teaching (15)(S)
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4335, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

LAE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

LAE 6339 Teaching English in the Secondary School (4)(F)
Analysis of methods, programs, and materials for teaching English in the junior and senior high school, and development of teaching skills.

LAE 6925 Workshop in English Education (1–5)(ARR)
Production and application of materials and techniques in English education in a laboratory or field setting.

LAE 6935 Seminar in English Education (4)(S)
Designed for advanced students, the readings and discussions will focus on policy issues and recent research in English education. Though primarily for experienced English teachers and supervisors, the course is open to administrators and others, with the consent of the instructor.

MAE 4333C Special Teaching Laboratory: Mathematics (5)(W)
Development of instructional skills, techniques, and strategies for teaching mathematics in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 25 hours in subject matter specialization.

MAE 4942 Student Teaching (15)(S)
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4335, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

MAE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

MAE 6336 Teaching Mathematics in the Secondary School (4)(F)
Analysis of methods, programs and materials for teaching mathematics in the junior and senior high school, and development of teaching skills.

MAE 6899 Seminar in Mathematics Education (4)(S)
Designed to provide the advanced student with deeper understanding of the current state of mathematics education. Major emphasis is on current trends and curriculum projects on the national and international levels, as well as evaluation and research related to these trends.

MAE 6925 Workshop in Mathematics Education (1–5)(ARR)
Production and application of materials and techniques in math education in a laboratory or field setting.

RED 4335 Special Teaching Laboratory: Reading (5)(F,W,S,SS)
Development of instructional skills, techniques, and strategies for teaching reading in the junior and senior high school. Attention to attaining competence in subject-matter related reading skills.

SCE 4330 Special Teaching Laboratory: Science (5)(W)
Development of instructional skills, techniques and strategies for teaching biological and physical sciences in the junior and senior high schools. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required. Minimum prerequisite or corequisite of 25–30 hours in subject matter specialization.

SCE 4944 Student Teaching (15)(S)
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4335, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

SCE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

SCE 6635 Teaching Science in the Secondary School (4)(F)
Analysis of methods, programs, and materials for teaching science in the junior and senior high school, and development of teaching skills.

SCE 6925 Workshop in Science Education (1–5)(ARR)
Production and application of materials and techniques in science education in a laboratory or field setting.

SCE 6933 Seminar in Science Education (4)(S)
Analysis of research trends and selected topics in science education. Mainly for graduate students in secondary science education. Individual needs and interests will determine the fine structure of the course content.

SSE 4384C Special Teaching Laboratory: Social Studies (5)(F,W)
Development of instructional skills, techniques, and strategies for teaching history and social science in the junior and senior high school. Prerequisites: EDF 3827, EDG 3321, and EDG 3322. Field experience required.

SSE 4942 Student Teaching (15)(W,S)
Supervised teaching in a junior or senior high school. Prerequisites: EDF 3827, EDG 3321, EDG 3322, RED 4335, appropriate Special Teaching Laboratory, and appropriate number of hours in subject matter specialization.

SSE 5908 Individual Study (1–5)(ARR)
The student plans and carries out an independent study project under direction. Prerequisite: Consent of instructor.

SSE 6633 Teaching Social Studies in the Secondary School (4)(F)
Analysis of methods, programs, and materials for teaching social studies in the junior and senior high school, and development of teaching skills.

SSE 6925 Workshop in Social Studies Education (1–5)(ARR)
Production and application of materials and techniques in social studies education in a laboratory or field setting.

SSE 6939 Seminar in Social Studies Education (4)(S)
Designed for advanced students, the readings and discussions will focus on policy issues and recent research in social studies education. Though primarily for experienced social studies teachers and supervisors, the course is open to administrators and others, with the consent of the instructor.

HEALTH EDUCATION

HES 4303L Special Teaching Laboratory: Health Education (5)
This course is designed to develop competencies directly associated with classroom teach-

(Continued)

Subject Specializations

ing. Students will be expected to demonstrate these competencies in a variety of public school situations.

HES 4001 Healthful Living: Community (5)
Students will develop competencies on community health by identifying, observing, and discussing aspects of health that affect society, such as ecology and pollution.

HES 4160 Critical Issues In Health Education (5)
The student will develop competencies in distinguishing between and interpreting those aspects of health which appear to be most important to society, including legislative issues and public opinion.

HES 4940 Student Teaching (15)(F,W,S)
During the internship the student will demonstrate those competencies which are characteristic of a competent health education teacher.

HES 5205 Current Concepts in Community Health (4)
Students will examine the attitudes of people with various social backgrounds, and discuss the ways in which these different attitudes relate to the formulation of community health programs.

HES 5326 Educational Approaches to Health Education (4)
Students will select various modern techniques and tools for teaching elementary health education, and employ these techniques and tools in a classroom setting.

HES 5327 Health Curricula in Public Schools (4)
Students will develop and analyze various health curricula and validate their appropriateness to various age groups.

HES 5908 Individual Study (1–5)(ARR)
Individuals work independently on health education topics of their choice under the direction of faculty members. Permission of the instructor and Division Chairperson is needed.

HES 6928 Creative Workshop in Health (4)
Students will create materials and teaching techniques for health education. These materials and techniques will then be utilized in practical classroom situations.

HES 6943 Supervised Field Experience (5–15)
A practical study pursued in an educational environment at a university, agency, or school approved by the faculty. Approval to enroll will be granted upon submission of an acceptable proposal stating objectives and desired outcomes of such an experience.

PHYSICAL EDUCATION

PET 3202 Physical Education in the Secondary School (5)
Students will study methods, philosophy, and curriculum for physical education in secondary schools, grades 6–12. Field experiences will be required in addition to class work.

PET 3310 Kinesiology (5)
This course is designed to provide students the opportunity to demonstrate in a teaching situation the application of various principles of movement.

PET 3360 Exercise Physiology (5)
Students will be expected to apply various aspects of the functioning of the human body to the development of physical education programs and the teaching of specific sport skills.

PET 3461C Physical Education in the Elementary School (5)
Students will study methods, philosophy and curriculum for modern physical education in elementary schools. K–6 Field experiences will be required in addition to class work.

PET 3640C Adapted Physical Education (5)
Competencies to be achieved include both a physiological and psychological understanding of atypical children and the ability to apply this knowledge in practical situations. Field experiences required.

PET 4230C Motor Learning (5)
Students will demonstrate knowledge and application of the physiological and psychological factors affecting motor skill acquisition and performance.

PET 4430 Physical Education for Primary Grades (5)
Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades K–3. A three-hour per week field experience in an elementary school is required.

PET 4433 Physical Education for Intermediate Grades (5)
Designed to provide students with competencies necessary for the development and implementation of physical education programs in grades 4–6. A three-hour per week field experience in an elementary school is required.

PET 4450L Special Teaching Laboratory: Physical Education (5)
This course is designed to develop competencies directly associated with classroom teaching. Students will be expected to demonstrate these competencies in a variety of public school situations.

PEO 4014C Coaching Sports (5)
Students will examine the philosophy, organization, and skills necessary for coaching interscholastic sports in an educational environment.

PET 4510 Evaluation in Physical Education (5)
Students will demonstrate competencies in motor skill testing, grading, and analysis of written test scores necessary for successful teaching in physical education.

PET 4622C Athletic Injuries (5)
Students will demonstrate knowledge of the proper care and prevention of athletic injuries through the application of acceptable training techniques.

PET 4945L Student Teaching (15)(F,W,S)
During the student's internship, the student will demonstrate those competencies which are characteristic of a competent physical education teacher.

PET 5125 History of Physical Education and Sport (4)
Students will study the history of sport and will take part in writing their own review of sport from a chosen time in history.

PET 5216 Sports Psychology (4)
Course will include an analysis of psychological variables which might influence physical performance. Topics to be discussed include personality development, motivation, anxiety, tension, stress, aggression, attribution theory, and social facilitation. The course is intended for prospective physical educators and others interested in motor performance. No prerequisites.

PET 5238C Perceptual Motor Learning (4)
Students will demonstrate knowledge and understanding of various approaches to, and theories of, perceptual motor learning, with special emphasis in physical education. Perceptual motor tasks will be performed as well as taught by the students.

PET 5256C Sociology of Sport (4)
Students will demonstrate a thorough understanding of the sociological bases of sport and will actively engage in a field study involving a particular phase of sport and society.

PET 5366C Sports Medicine (4)
The class will focus on the application of medical knowledge to sport with the aim of preserving the health of an athlete, while improving performance.

(Continued)

Vocational Education

PET 5426 Curriculum Development in Physical Education (4)
Students will develop their own curricula after examining and discussing modern curriculum theory. A problem-solving approach will be employed as students test their programs at various grade levels in the public schools.

PET 5438 Physical Education Curriculum in the Elementary School (4)
Examination of objectives, content, methods of teaching, and evaluative techniques in elementary school physical education. Emphasis on curriculum development and refinement of teaching skills.

PET 5906 Individual Study (1–5)(ARR)
Students will work independently on a topic concerning some phase of physical education or sport under the guidance of a faculty member. Registration is by permission of advisor.

PET 6535 Survey of Research in Physical Education (4)
Following a survey of research in physical education, students will demonstrate competencies in applying this knowledge to teaching situations in the public schools.

PET 6925 Workwhop in Physical Education (1–5)
Students will create materials and teaching techniques for physical education. These materials and techniques will then be utilized in practical classroom situations.

PET 6932 Seminar in Physical Education (4)
Students will participate in the exploration, examination, and discussion of problems, issues, and trends in physical education and sport.

PET 6944 Supervised Field Experience (5–15)(F,W,S)
Students may use this course to become involved in an in-depth study, research project, or any one of a variety of other activities, under the guidance of a faculty member.

International Institute for the Study of Sport (IISS)

Florida International University will begin to conduct significant research in national and international sport in September, 1979, in the newly established International Institute for the Study of Sport (IISS), pending approval from the Florida Board of Regents. The primary purpose of the Institute is to examine sports as an object of liberal inquiry, investigating its biological, psychological, and sociological dimensions. All students, both undergraduate and graduate, who are interested in participating in the institute should contact Dr. Jack H. Llewellyn, Director; Dr. Richard Lopez, Associate Director of Operations; or Dr. Donald Smith, Associate Director of Research.

Division of Vocational Education

Dominic Mohamed, *Associate Professor and Chairperson*
Myrna P. Crabtree, *Professor*
Dean Hauenstein, *Professor*
Curtis Bradley, *Associate Professor*
George W. Vanover, *Associate Professor*
Rosemere Baum, *Assistant Professor*
Robert O. Pryor, *Assistant Professor*
Janice R. Sandiford, *Assistant Professor*
Dennis G. Tesolowski, *Assistant Professor*
Chester Wichowski, *Assistant Professor*

The Division prepares and services professional personnel whose major functions are to teach, coordinate, supervise, and administer vocational education programs in schools and other public and private agencies. Programs of preparation utilize a multi-school approach across academic disciplines within the University. The Division utilizes performance-based curricula to develop competencies at the undergraduate and graduate levels. In addition to formal degree programs, the Division offers courses for specific areas of certification in vocational teacher/administration certification.

Undergraduate Programs

The Division offers undergraduate preparation leading to the degree of *Bachelor of Science* in Education with specialized majors in the following areas: Industrial Arts Education, Technical Education, Vocational Home Economics Education, Vocational Industrial Education. Although the programs are designed for entry into the field of public education, a candidate may seek employment in business, industry, or other private agencies.

Applicants for admission are required to have an associate degree or equivalent course work. For specific entrance requirements, consult the general admission statement for undergraduate students in this catalog. Because of the wide range of entry level competencies and career goals, each student in consultation with his or her advisor plans a program of study during the first quarter of enrollment.

Business Teacher Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Required Technical Preparation: Business Machines, *advanced* courses in typewriting and shorthand, office practice or secretarial procedures. Students should complete as much of the following as possible at the community college or its equivalent course work from another four-year college or university with the remainder to be taken at FIU: Six semester hours in accounting, six semester hours in economics, two semester hours in business English, and two semester hours of business law.

UPPER DIVISION PROGRAM:

		Quarter Hours
Professional Education		**(60–75)**
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
RED 4335	Special Teaching Laboratory: Reading	5
EVT 3065	Foundations of Vocational Education	5
*EVT 4949	Supervised Occupational Experience	(5–15)
BTE 3068	Principles of Business Education	5
BTE 4360	Special Teaching Lab: Business Education Non-Skills	5

(Continued)

Vocational Education

BTE 4364	Special Teaching Lab: Business Education Skills	5
BTE 4944	Special Teaching Lab: Business Education Practicum	5
BTE 4945	Student Teaching in Business Education	15

Business Administration **(20)**

Recommended Courses:

FIN 3100	Personal Finance & Resource Management	5
FIN 3403	Financial Management	5
MAN 3010	Organization and Management	5
MAN 3023	Marketing Management	5

Electives: Electives are recommended either in the School of Education or School of Business Administration and Organizational Sciences, and in consultation with the program advisor. **(10)**

*To be a certified vocational business teacher one must have one year (or its equivalent) of office work experience. Supporting letters from former employers are required. EVT 4949 may be taken to meet the work experience requirement.

Vocational Home Economics Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Recommended Courses: With reference to subject matter specialization, the student is required to have for certification 65 quarter hours in the areas listed below under *Technical Preparation.* These may be earned in courses in both the lower and upper divisions. It is recommended that as many of the basic courses in these areas as possible be taken in the lower division.

UPPER DIVISION PROGRAM:

		Quarter Hours
Professional Education:		**50**
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
HEE 3302	Home Economics Educational Planning	5
RED 4335	Special Teaching Lab: Reading	5
HEE 4104	Instruction in Vocational Home Economics	5
HEE 4944	Special Teaching Laboratory: Home Economics Education	5
HEE 4941	Student Teaching: Home Economics Education	15
Technical Preparation: Total of 65 quarter hours needed from lower and upper division:		**(65)**
Housing and Home Furnishing*		10
Management and Family Economics*		10
Family and Child Development*		15
Food and Nutrition*		15
Textiles and Clothing*		15
*Courses offered in the School of Technology		
Advised Electives:		**5**
Sub-specialty area of concentration:		

Competencies may be developed in one of the following fields:

1. One area of consumer and homemaking education
2. One area of wage-earning home economics
3. Education for the handicapped
4. Education for the culturally disadvantaged
5. Education for the adult learner
6. Educational settings in business, industry or public service agencies

90

Health Occupations Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Required Technical Preparation: Occupational preparation in the student's intended area of teaching such as nursing, dental, medical technology, respiratory therapy, radiology technology and other allied health related occupations requiring training beyond the twelfth grade. Licensure in occupational area when applicable.

Suggested Electives	*Quarter Hours*
Electives should be taken to equal a minimum of 90 quarter hours	**20**

UPPER DIVISION PROGRAM:

Professional Education Requirements:

		Quarter Hours
Professional Education		**65–80**
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Lab I Basic Teaching Skills	5
EDG 3322	General Teaching Lab II Human Relations Skills	5
RED 4335	Special Teaching Lab–Reading	5
EVT 3065	Foundations of Vocational Education	5
or		
EVT 5078	Technical Education in American Society	4
EVT 3165C	Course Planning in Voc. Educ.	5
EVT 3367	Tests and Measure-	

(Continued)

Vocational Education

	ments in Voc. Educ.	5
*EVT 4949	Supervised Occupational Experience	5–15

*For the student who lacks acceptable occupational experience in the area to be taught. Not to be counted in the upper division 90 hours minimum required for graduation.

Specialization Area Requirements

EVT 4310	Planning and Operating HOE Programs	5
EVT 4311C	Special Teaching Lab	5
EVT 4312	Instructional Strategies and Evaluation in HOE Programs	5
EVT 4940	Student Teaching in Health Occupations Education Programs	15

Industrial Arts Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Recommended Courses: With reference to the technical preparation outlined below the student is encouraged to take basic courses in each area in the lower division.

UPPER DIVISION PROGRAM:

		Quarter Hours
Professional Education		45
EDF 3827	Schooling in America	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
EVT 3165C	Course Planning Vocational Education	5
RED 4335	Special Teaching Laboratory: Reading	5
EIA 4360	Instruction in Industrial Arts	5
EIA 4941	Student Teaching: Industrial Arts Education	15
Technical Preparation:		45

Required: A minimum of 45 quarter hours are required for certification, with a minimum of 10 quarter hours in each of the following areas:

CONSTRUCTION

BCN 3702C	Construction Technology	5
ETC 4252L	Construction Processes	5
BCN 4251C	Architectural Drafting	5

MANUFACTURING

ETI 3417C	Manufacturing Technology	5
ETI 4421C	Materials Processing	5
EDT 4525C	Drafting I	5
or		
ETD 4526C	Drafting II	5
ETM 4823C	Materials of Industry	5
BCN 4033	Industrial Research and Development	5

GRAPHIC COMMUNICATIONS

ARV 3210	Reprographics	5
ARV 4250	Planographics	5
ARV 4150	Photographics	5

POWER

ETM 4407	Mechanical Power Systems I	5
ETE 4562	Electrical/ Electronics Systems	5
ETE 3030	Survey of Electronics	5
ETM 4408	Mechanical Power Systems II	5

Advised Electives: Enough electives should be taken to equal a minimum of 90 quarter hours.

90

Post-Secondary Technical Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Required Technical Preparation: Technical preparation in the student's intended area of teaching such as electronics technology, architectural technology, dental hygiene, commercial art, electronic data processing, electro-mechanical technology and other occupations requiring training beyond the twelfth grade or demonstration of competency via EVT 4990 listed below.

UPPER DIVISION PROGRAM:

		Quarter Hours
Professional Education		73–83
EDF 3827	Schooling in America	5
EVT 5078	Technical Education in American Society	4
EDG 3321	General Teaching Laboratory I	5
ADE 5385	Adult Teaching and Learning	4
EDG 3322	General Teaching Laboratory II	5
EVT 3165C	Course Planning in Vocational Education	5
RED 4325	Special Teaching Laboratory: Reading	5
EVT 4949*	Supervised Occupational Experience	5–15

*For the student who lacks acceptable occupational experience in the area to be taught.

or		
EVT 4990	Credit by Examination	5–45
EVT 5460	Educational Media	5
EVT 4941	Special Teaching Laboratory: Technical Education	5

(Continued)

Vocational Education

EVT 4940	Student Teaching: Technical Education	15
Advised Electives: Science, mathematics, technology, psychology or sociology		10
Free Electives: Enough electives should be taken to equal a minimum of 90 quarter hours		10
		90

Vocational Industrial Education

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: Foundations of Education (10 quarter hours).

Occupational Experience: Evidence of appropriate occupational experience (as per Section 42, Florida State Teacher Certification Guide) must be presented prior to being admitted to the Vocational Industrial Education Bachelor of Science Degree Program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Professional Education:		65–75
EDF 3827	Schooling in America	5
EVT 3065	Foundations of Vocational Education	5
EDG 3321	General Teaching Laboratory I	5
EDG 3322	General Teaching Laboratory II	5
RED 4335	Special Teaching Lab: Reading	5
EVT 3165C	Course Planning in Vocational Education	5
EVT 3815C	Vocational Education Laboratory Management and Safety	5
EVT 4949*	Supervised Occupational Experience	5–15

*For students who lack acceptable occupational experience in the area to be taught.

or		
EVT 4990	Credit by Examination	5–45
EVT 5460	Educational Media	5
EVT 4941	Special Teaching Laboratory: Voc.-Ind. Ed	5
EVT 4940	Student Teaching: Voc.-Ind. Ed	15
Advised Electives:		10
SOC 4265	Man, Society, and Technology	
or		
SOC 5261	Industrial Sociology	5
or		
INP 3002	Industrial Psychology	
or		
EVT 4562	Laboratory Activities for Teachers of the Handicapped	5
EGC 5305	Educational and Vocational Guidance	5
Free Electives: Enough electives should be taken to equal a minimum of 90 quarter hours		10
		90

Professional Certificate Programs

The Division offers programs for Rank III and Rank II vocational professional certification. A student in any of these programs should enroll in the University as a professional certificate student in vocational education.

The Standard Certificate Rank III program in vocational teacher education is designed to qualify the practicing vocational education teacher for employment in comprehensive secondary schools, vocational skill centers, and/or technical institutes.

The Post Standard Professional Certificate Rank II program in vocational teacher education is designed to extend to the practicing vocational education teacher certification for teaching in comprehensive secondary schools, vocational skill centers, and technical institutes.

Certificate Programs in Industrial Arts Education and Administration and Supervision of Vocational Education Programs are presently being planned for implementation. For specific information concerning the status of each program, contact the Division Chairperson.

Rank III Vocational Teacher Certification Education

The Standard Certificate in Rank III (valid for 3 years) will be issued by the State Teacher Certification Office to an individual having: (a) three years full-time teaching experience in vocational industrial education subjects, and (b) 30 quarter hours in professional education and vocational teacher education courses. Specific requirements can be found in Section 42 of the State Teacher Certification Guide. Planned programs of preparation completed for certification requirements may be applied to degree requirements.

RECOMMENDED PREPARATION RANK III VOCATIONAL TEACHER CERTIFICATION

		Certificate Area	Quarter Hours
Required Courses: Foundations of Education (10 quarter hours)			10
Professional Vocational Education:			
EVT 3065	Foundations of Vocational Education	A	5
EVT 3165C	Course Planning in Vocational Education (suggested second course in sequence)	B	5
EVT 3815C	Vocational Education Laboratory Management and Safety	C	5
EVT 4365C	Instructional Processes in Vocational and		

(Continued)

Vocational Education

	Technical Education (suggested first course in sequence)	C 5
EVT 3367	Testing and Measurement in Vocational Education Subjects	B 5

Post Standard Rank II Vocational Teacher Certification Education

The Post Standard Certificate in Rank II (valid for 10 years) will be issued by the State Teacher Certification Office to an individual who (a) has completed 30 quarter hours required in Rank III vocational teacher certification courses, and (b) has been employed as a teacher in public or non-public schools in Florida for three years, and (c) earned 54 quarter hours of college credit in vocational teacher education and general education and/or general professional education and/or technical education courses.

The 54 quarter hours of course work is planned so that (a) a minimum of 18 and a maximum of 27 quarter hours are earned in professional vocational education courses, and (b) a minimum of 18 and a maximum of 27 quarter hours are earned in general education or general professional education and/or technical education courses. A candidate is urged to consult with a Division advisor to formulate a program of study for approval by the State Teacher Certification Office prior to starting his or her program.

Professional Graduate Certificate Program for Business Education

The professional Graduate Certificate Program for Business Education requires a minimum of 24 quarter hours of course work above the bachelor's degree. This program is designed for those who have already earned a bachelor's degree with a major in Business Education. Consequently, the student will have already met the State Department of Education certificate requirements.

A candidate is urged to consult the Business Education advisor to plan a program of study prior to starting a program.

Recommended Preparation

		Quarter hours
RED 6335	Teaching Reading in the Secondary Schools	4*
EVT 5168	Curriculum Development in Vocational Education	4
EVT 5766	Evaluation in Vocational-Technical Education	4
BTE 5671	Problems, Issues and Trends in Business Education	4
BTE 5371	Teaching in Business Education Occupational Programs *or*	4
BTE 5774	Teaching Basic Business and Consumer Education	
Advised Electives		4–8

**Students who have already met the reading requirement as an undergraduate or through in-service education will not be required to take this course.*

Health Occupations Education Professional Certificate Program

General Information

The overall purpose of the professional certificate program in health occupations education is too enhance the development of basic teaching skills and/or instructional techniques of health occupations educators. The professional certificate program provides for the continuing education, upgrading or redirection needs of health occupations teachers through planned advisement and professional certificate recognition. The programs are for both undergraduate and graduate, degree or non-degree seeking students.

Undergraduate Professional Certificate Program

This 30 quarter-hour plan is designed to meet the needs of the individual who 1) is occupationally competent in the health field, 2) does not hold or intend to hold a bachelor's degree in Health Occupations Education, and 3) is currently teaching, or wishes to teach, a health occupations subject.

Prescribed Courses:

		Quarter Hours
EVT 3065	Foundations of Vocational Education	5
EVT 3165C	Course Planning in Vocational Education	5
EVT 3367	Testing & Measurement in Voc. Education	5
EVT 4310	Planning & Operating a Health Occup. Program	5
EVT 4312	Instructional Strategies & Evaluation in Health Occupations Programs	5

Advised Electives: A minimum of one course selected from courses in General Professional & Adult Education, Vocational Education, Health Service Administration, or health specialty.

Graduate Professional Certificate Program

This 32 hour plan is designed to meet the needs of the individual who 1) is occupationally competent in a health field and currently teaching or desires to teach a health occupations subject, 2) holds a teaching certificate or equivalent and/or bachelor's degree (or both) including out of field and 3) does not wish to, or is unable to, meet the master's degree entrance requirements necessary to pursue the master's degree.

Prescribed Courses:

		Quarter Hours
EVT 5078	Technical Education in American Society	4
or		
EVT 5669	Trends & Issues in Vocational Education	4
EVT 5168	Curriculum Development in Voc. Educ.	4
EVT 5766	Evaluation in Voc. & Tech. Education	4
EVT 5315	Improvement of Teaching	

(Continued)

Vocational Education

	Strategies in Health Occupations & Nursing Education	4
EVT 5163	Occupational Analysis in Health Occupations and Nursing Education	4
and/or		
ADE 5383	Adult Teaching and Learning	4
Advised Electives: A minimum of two courses selected from courses in General Professional and Adult Education, Vocational Education, Health Service Administration or Health Specialty		**8–10**

Vocational Education for the Handicapped

Professional Certificate Program

Vocational Education for the Handicapped is a non-degree Professional Certificate Program offered through the School of Education. The project represents a unique cooperative effort between the Divisions of Vocational Education and Psycho-Educational Services. Instruction in the program focuses on training professionals in vocational skill areas to more appropriately serve the needs of handicapped adolescents and young adults.

Students who are pursuing, or have completed, either Florida Teacher Competency and Certification, or the bachelor's or master's degree in vocational education or special education are encouraged to enroll in this professional certificate program. Program competencies were selected to enhance professionals' knowledge, skills, and attitudes in the following roles: instructional, diagnostic-prescriptive, behavior manager, advocacy, referral agent, and counselor. These professional roles are represented by 124 competencies which are packed in 6 courses or 30 quarter hours of instruction. Four of these six courses are required courses and two are electives.

The Division of Personnel Preparation in the Bureau of Education for the Handicapped has financially supported this program with a Federal Grant for the past four years. Subsequently, it has been possible to provide financial assistance in the form of a Federal stipend to selected applicants. Students interested in applying for financial assistance should seek further information between January 15 and March 15 of any calendar year.

Graduate Programs

The Division offers graduate course work leading to the degree *Master of Science* in Education in Curriculum and Instruction, and Administration and Supervision in Vocational Education.

Requirements for admission to the graduate program in either Curriculum and Instruction or Administration and Supervision for Vocational Education are: the applicant must hold an appropriate certificate or equivalent and (1) have an upper division undergraduate grade point average of 3.0 ("B"), or (2) have a combined score of 1000 on the Graduate Record Examination, (GRE) (verbal and quantitative aptitude sections), or (3) for vocational-industrial and technical education programs only, have a combined score of 2250 on the general examination of the "College Level Examination Program" (CLEP), with a minimum score of 400 on each section.

Master of Science degrees in Business Teacher Education and Health Occupations Education are presently being planned. For specific information concerning these programs, contact the Division Chairperson.

Students are urged to contact the Admission Office or the Division for further information.

Areas of emphasis available, along with typical program of study, follow here.

Note: Students who have already met the reading requirement (p. 160) as an undergraduate or through in-service education may substitute an elective for RED 6333.

Vocational Home Economics Education

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		**20–24**
HEE 5335	Trends in Vocational Home Economics Education	4
EVT 5168	Curriculum Development in Vocational Education	4
HEE 6915	Research in Home Economics Education	4
HEE 6126	Teaching Home Economics in the Secondary School	4
HEE 6937	Seminar in Home Economics Education	4
RED 6337	Teaching Reading in the Secondary School	4
Area of Professional Emphasis: With program advisor's approval, a student may select courses in subject matter of Home Economics chosen from offerings outside of the School of Education, based on professional competencies needed.		**15**
Electives: The candidate will be encouraged to make selections on the basis of individual needs and career goals.		**6–10**
		45

Vocational Industrial Education

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		**20–24**
EVT 5669	Trends and Issues in Vocational Education	4
EVT 5168	Curriculum Development in Vocational Education	4
EVT 5766	Evaluation in Vocational and Technical Education	4
EVT 6760	Research in Vocational Education	5
EVT 6930	Seminar in Vocational Education	4
RED 6337	Teaching Reading in the Secondary	

(Continued)

Vocational Education

	School	4
Area of Professional Emphasis: A student under the direction of an advisor, may develop professional competencies in an area of emphasis through school-based field experiences, seminars, methods courses, workshops, or independent study.		**12–17**
Technical Electives: The candidate will be encouraged to select courses that will increase subject area technical competence.		**4–9**
		45

Technical Education

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		**20–24**
EVT 5669	Trends and Issues in Vocational Education	4
EVT 5168	Curriculum Development in Vocational Education	4
EVT 5766	Evaluation in Vocational and Technical Education	4
EVT 6760	Research in Vocational Education	5
EVT 6930	Seminar in Vocational Education	4
RED 6337	Teaching Reading in the Secondary School	4
Area of Professional Emphasis:		**8**
EVT 5078	Technical Education in American Society	4
ADE 5385	Adult Teaching and Learning	4
Technical Electives:		8–13

The candidate will be encouraged to select courses that will increase subject area technical competence.

Advised Electives for Non-education Graduates: **8–10**

EDF 5710	National Educational Systems: A Comparative Analysis (4)	4–5
or		
SOC 5284	Sociology of Education (5)	
and		
EXP 5406	Theories of Learning (5)	
or		
EDF 6215	Application of Learning Theory to Instruction (4)	4–5

45

Industrial Arts Education

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		**20–24**
EVT 5669	Trends and Issues in Vocational Education	4
EVT 5168	Curriculum Development in Vocational Education	4
EVT 5766	Evaluation in Vocational and Technical Education	4
EVT 6760	Research in Vocational Education	5
EVT 6930	Seminar in Vocational Education	4
RED 6337	Teaching Reading in the Secondary School	4
Area of Professional Emphasis		**12–16**
EIA 5811	Equipment and Facilities Planning	4
EIA 6931	Analysis of Industrial Arts Education	4

The student, under the direction of his or her advisor, may develop professional competencies in an area of emphasis through seminars, methods courses, workshops, or independent study.

Technical Electives: The student is encouraged to select courses that will increase subject area technical competence.		**5–10**
		45

Administration and Supervision of Vocational Education

Area of Emphasis: Vocational Education

Admission to graduate programs in the Division requires adherence to the general standards as specified in the Admission Requirements for Graduate Students in this Division. In addition, an applicant must have completed at least one (1) year of successful teaching experience as a teacher of vocational education classes. Under certain conditions, an applicant not meeting the minimum requirements, and who has appropriate professional background and aspirations, may be considered on an individual basis by the Division faculty. Each graduate student, in consultation with the advisor, plans a program of study to include a core of professional competence, an area of emphasis, and electives. The programs require a minimum of 45 quarter hours.

DEGREE: *Master of Science*

		Quarter Hours
Required Core:		**36–40**
EVT 5168	Curriculum Development in Vocational Education	4
EVT 5265	Supervision and Coordination of Vocational Education Programs	4
EVT 5461	Community Relations and Resources for Vocational Education	4
EVT 6264	Administration of Local Vocational Education Programs	4
EVT 6930	Seminar in Vocational Education	4
EDA 6061	The Organization and Operation	

(Continued)

Vocational Education

	of the Public School System	4
EDA 6530	The Administration of the Secondary School	4
EDS 6050	Supervision in Education	4
EDG 6250	Curriculum Development	4
RED 6337	Teaching Reading in the Secondary School	4
Area of Professional Emphasis:		4
EVT 6946	Supervised Field Experience	4
Electives: The candidate may select a course (or courses) that will increase administrative and supervisory competencies.		5
		45

The Specialist in Education and Doctor of Education Degrees

Preliminary feasibility studies and need assessments are being conducted for possible establishment of a Specialist in Education degree and a Doctor of Education degree in co-operation with other institutions in the areas of Vocational Education, Industrial Arts Education, Home Economics Education, and Business Teacher Education. For specific information concerning the status of each program, contact the Division Chairperson.

Course Descriptions

Definition of Prefixes

BTE–Business Teacher Education: EDG–Education: General; EEX–Education: Exceptional Child, core competencies; EIA–Education: Industrial Arts; EVT–Education: Vocational/Technical; HEE–Home Economics Education; HES–Health, Education, and Safety.

VOCATIONAL EDUCATION

EVT 3065 Foundations of Vocational Education (5)(F,S)
Competency: A knowledge of the history of vocational education on the national, state, and local levels.

EVT 3165C Course Planning (5)(F,W,S)
Competency: Basic knowledge and skill in analyzing, planning, and organizing bodies of knowledge for instructional purposes.

EVT 3367 Testing and Measurements in Vocational Education Subjects (5)
Competency: Technical knowledge and skill in planning for and using tests and measurements as an integral part of the vocational-technical laboratory/shop teaching-learning process. Prerequisite: EVT 3165, Course Planning.

EVT 3815C Vocational Education Laboratory Management and Safety (5)(W)
Competency: Knowledge and skill in analyzing, planning, organizing, and controlling laboratory environments and student's safe learning activities.

EVT 4280 Occupational Safety & Health (OSHA) 5
Competency: Knowledge of the history, implications and applications of the Occupational Safety and Health Act of 1970. For vocational and technical teachers, industrial employees, and management personnel.

EVT 4365C Instructional Strategies and Evaluation in Vocational and Technical Education (5)(F)
Competency: Knowledge and skill in analyzing, planning, developing, executing, and evaluating classroom and laboratory teaching and learning activities.

EVT 4562 Laboratory Activities for Teachers of the Handicapped (5)
Competency: The use of projects, tools, materials, and equipment to facilitate training the occupationally handicapped, physically handicapped and mentally retarded.

EVT 4668 Emerging Emphasis in Career Education (5)(F)
Competency: A knowledge of current trends and issues in reference to developing and integrating career education into current elementary and secondary educational programs.

EVT 4905 Individual Study (1–5)(maximum 10 hrs.)(ARR)
Competency: The ability to identify, research, and report on a special problem of interest to the student. Subject to approval of program advisor.

EVT 4940 Special Teaching Laboratory: Vocational Industrial Education and Technical Education (5)(F,W)
Competency: Knowledge of institutional structure, organization, policies, and roles of school personnel, with actual teaching experience in areas of specialization. Prerequisites: EDG 3321, EDG 3322.

EVT 4941 Student Teaching: Vocational Industrial Education and Technical Education (15)(W,S)
Competency: Utilization of instructional knowledges, attitudes, and skills in a variety of instructional situations in the vocational educational setting. Prerequisite: EDG 4941.

EVT 4949 Supervised Occupational Experiences (5–15)(ARR)
Competency: Occupational skill developed via field based work-experience in industry, business, or a government agency in the occupation in which the student is preparing to teach.

EVT 4990 Credit by Examination (5–30)(ARR)
Competency: Technical knowledge and skills in an occupational area such as trade, industry, health and technology, as certified by recognized professional examinations such as the National Occupational Competency Test. Credits cannot be used in lieu of upper division professional program courses.

EVT 5067 Cooperative Vocational Education Programs (4)(F)
Competency: Knowledge and skill in the basic philosophy, principles, and processes and procedures of the cooperative method in vocational and technical education.

EVT 5078 Technical Education in American Society (4)(W)
Competency: Knowledge of the basic role and current status of technical education in an industrial democracy.

EVT 5168 Curriculum Development in Vocational Education* (4)(W)
Competency: Basic knowledge and skill in analyzing, planning, organizing and developing curriculum in an area of specialization.

EVT 5265 Supervision and Coordination of Vocational Education Programs (4)(F)
Competency: Knowledge and skill in the supervision of personnel, and the coordination of work to achieve institutional goals.

EVT 5389 Teaching Career Related Activities (5)(W,SS)
Competency: Integration and articulation of career concepts and activities with regular curriculum.

EVT 5460 Educational Media (5)(F,W,S,SS)
Competency: Knowledge and skill in selecting, developing and utilizing instructional media forms to communicate or demonstrate concepts.

(Continued)

Vocational Education

EVT 5461 Community Relations and Resources for Vocational Education (4)(S)
Competency: Knowledge and skill in developing and utilizing community resources and establishing public relations procedures and practices to implement vocational education programs.

EVT 5669 Trends and Issues in Vocational Education* (4)(F,S)
Competency: A knowledge of the basic philosophical and curricular trends and issues in vocational-technical education at the international, national, state, and local levels.

EVT 5695 International Comparative Vocational Education (4)
Competency: Skill and knowledge in comparison of vocational education in the United States in terms of purposes, systems, and problems with those of selected foreign countries.

EVT 5766 Evaluation in Vocational and Technical Education* (4)(S)
Competency: Knowledge and skills in the use of tests and measurements, to evaluate teaching and learning effectiveness and the validity of objectives.

EVT 5905 Individual Study (1–5)(ARR)
Competency: The ability to identify, research, and report on a special problem of interest to the student. Subject to approval of program adviser.

EVT 5925 Workshop in Vocational Education (1–10)
Competency: Selected competencies related to instructional and technical areas.

EVT 6264 Administration of Vocational Education Programs (4)(S)
Competency. Knowledge of the principles, practices, functions, and roles of administration, in the operation of vocational education programs.

EVT 6760 Research in Vocational Education* (5)(S)
Competency: Knowledge and skill in identifying, defining, collecting, analyzing, and synthesizing research-related problems in vocational and adult education.

EVT 6925 Graduate Workshop in Vocational Education (1–10)(APR)
Competency: Selected competencies related to professional and program areas.

EVT 6930 Seminar in Vocational Education* (2–4)(W)
Competency: The application of knowledge and skills to solve special instructional, curricular and/or administrative and supervisory problems and issues in vocational education.

EVT 6946 Supervised Field Experience (4–8)(APR)
Competency: Application and refinement of competencies in either classroom, laboratory, or administration, and supervision, via school-based field experiences. Placement is subject to approval of program advisor.

HES 4280 Occupational Safety and Health (OSHA) (5)(S)
Competency: Knowledge of the history, implications, and applications of the Occupational Safety and Health Act of 1970. For vocational and technical teachers, industrial employees, and management personnel.

*Graduate Standing Required.

HEALTH OCCUPATIONS EDUCATION

EVT 4310 Planning and Operating HOE Programs (5)(F,S)
Competency: Identifying, designing, implementing and evaluating Health Occupations Education Program.

EVT 4311C Special Teaching Lab in HOE Programs (5)(W,S)
Competency: Knowledge of institutional structure, organization, policies, and roles of school personnel with actual teaching experience in area of specialization.

EVT 4312 Instructional Strategies and Evaluation in HOE Programs (5)(W)
Competency: Knowledge and skill in analyzing, planning, developing, executing and evaluating classroom and laboratory teaching and learning activities in Health Occupations Education.

EVT 4941 Student Teaching in Health Occupations Ed. Programs (5)(F,S)
Competency: Utilization of instructional knowledges, attitudes and skills in a variety of health occupations instructional situations. Prerequisites: HOE 4310, 4311C, 4312.

EVT 5163 Occupational Analyses in Health Occupations and Nursing Education (4)(W,SS)
Competency: Analysis of current trends in area of health specialty and their application to teaching learning situations in health occupations education. Prerequisites: Currently teaching, permission of instructor, professional liability insurance.

EVT 5315 Improvement of Teaching Strategies in Health Occupations and Nursing Education (4)(F,S)
Competency: Knowledge and skills in methods of teaching, and clinical performance evaluation appropriate to the health field, and development of teaching materials. Prerequisites: Currently teaching, or permission of instructor.

BUSINESS TEACHER EDUCATION

BTE 3068 Principles of Business Education (5)(F,S)
Competency: A knowledge of basic philosophies, principles, practices, trends, and objectives in Business Education

BTE 4360 Special Teaching Lab: Business Education Non-Skills (5)(F,S)
Competency: Knowledge and application of instructional principles, methods, techniques and practices to the teaching of accounting, bookkeeping, and basic business and economic education courses. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4494.

BTE 4364 Special Teaching Lab: Business Education Skills (5)(W,S)
Competency: Knowledge and application of instructional principles, methods, techniques and practices to the teaching for office careers to include office simulation and cooperative business education. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4494.

BTE 4944 Special Teaching Lab: Business Education Practicum (2–5)(F,W,S)
Competency: Application of methods of teaching in business and office occupations in selected institutions and knowledge of educational institutions. Prerequisites: BTE 3068 and professional education core concurrent with BTE 4360 and BTE 4364.

BTE 4945 Student Teaching in Business Education (15)(W,S)
Competency: Competencies developed in the utilization of instructional knowledges, attitudes, and skills in business education instructional situations. Prerequisites: BTE 3068, 4360, 4364 and 4994; professional education core.

BTE 5371 Teaching in Business Education Occupational Programs (4)(SS)
Competency: Knowledge of current and evolving methods, techniques and practices to teach and evaluate office education programs to include office simulation and cooperative business education.

BTE 5671 Problems, Issues and Trends in Business Education (4)(S)
Competency: Historical information, issues, current trends, new dimensions and problems

(Continued)

Vocational Education

in business education. Prerequisite: Graduate standing.

BTE 5774 Teaching Basic Business & Consumer Education (4)(SS)
Competency: Knowledge of current and evolving methods, techniques and practices to teach and evaluate basic business and consumer education programs. Prerequisite: Graduate Standing.

INDUSTRIAL ARTS EDUCATION

EIA 4042 The Role of Industrial Arts in the Schools (5)
Competency: Knowledge of the basic philosophy, goals, programs, principles, practices and learning environments in industrial arts, and the relationship of industrial arts to other school disciplines.

EIA 4360 Instruction in Industrial Arts (5)(F,W)
Competency: Application of education principles, practices, and techniques to the teaching of industrial arts. Prerequisite: EDG 3321.

EIA 4941C Student Teaching in Industrial Arts (15)(W,S)
Competency: The utilization of instructional knowledge, attitudes, and skills in industrial arts education instructional situations. Prerequisites: EIA 4360, EVT 3165C.

EIA 5811C Equipment and Facilities Planning (4)(S)
Competency: Utilization of research, design, and engineering knowledge and skills to plan laboratory facilities and equipment.

EIA 5905 Individual Study (1–5)(APR)
Competency: The ability to identify, research, and report on an industrial arts problem of interest to the student. Subject to approval of program adviser.

EIA 6931 Analysis of Industrial Arts Education (4)(W)
Competency: Knowledge of industrial arts at the national, state, and local levels.

VOCATIONAL HOME ECONOMICS EDUCATION

HEE 3302 Home Economics Educational Planning (5)
Competency: Development and adaptation of curriculum and strategies for the presentation of vocational home economics content in a variety of educational settings.

HEE 4104 Instruction in Vocational Home Economics (5)
Competency: Ability to apply educational principles, practices and techniques to teaching home economics in varied educational environments. Prerequisite: EDG 3321.

HEE 4941 Student Teaching in Home Economics Education (15)(F,S)
Competency: The utilization of instructional knowledges, attitudes, and skills in vocational home economics education instructional situations. Prerequisites: HEE 3301, HEE 4014, HEE 4944.

HEE 4944 Special Teaching Laboratory Home Economics (5)(W,S)
Competency: Knowledge of the educational institution, and utilization of teaching skills, via mini-teaching experiences within areas of home economics in selected institutions. Prerequisites: EDG 3321, EDG 3322, HEE 3302, HEE 4104.

HEE 5335 Trends in Vocational Home Economics Education (4)(F)
Competency: Knowledge of current social, economic and educational issues affecting the field of vocational home economics. Subject to approval of program adviser.

***HEE 5360 Teaching Child Development (5)**

***HEE 5361 Teaching Consumer Education and Family Economics (5)**

***HEE 5362 Teaching Clothing and Textiles (5)**

***HEE 5363 Teaching Family Life Education (5)**

***HEE 5364 Teaching Housing and Home Furnishings (5)**

***HEE 5365 Teaching Food and Nutrition (5)**

HEE 5905 Individual Study (1–5)(F,W,S,SS)
Competency: The ability to identify, research, and report on a special problem in vocational home economics. Subject to approval of program adviser.

HEE 5927 Special Workshop–Home Economics (1–5)
Competency: Skill in developing, organizing, teaching, evaluating, and administering programs related to specific aspects of the home economics education. Subject to approval of program adviser.

HEE 6126 Teaching Home Economics in the Secondary School (4)
Competency: Knowledge of current and evolving methods, programs, and materials to teach and evaluate home economics. Prerequisite: EVT 5168 or permission of instructor.

HEE 6551 Supervision of Student Teachers in Home Economics (4)
Competency: Skill in teaching, observing, and evaluating student teachers in vocational home economics.

HEE 6915 Research in Home Economics Education (4)
Competency: The analysis and application of research pertaining to philosophy, curriculum, evaluations, and teacher education in home economics. Subject to approval of program advisor.

HEE 6937 Seminar in Home Economics Education (4)
Competency: Application of selected instructional, curricular and/or administrative principles and practices to the solution of problems of special interest to vocational home economics educators. Subject to approval of program adviser.

*Course is designed to upgrade competency in planning, researching, and evaluating experiences that are current in content and educational methods.

Faculty

School of Education

Dean	**John A. Carpenter**
Chairpersons	
Childhood Education	**Richard Campbell**
Educational Leadership and Human Resources Development	**Charles Divita, Jr.**
Psycho-Educational Services	**Wendy Cheyney**
Subject Specializations	**Judith Blucker**
Vocational Education	**Dominic Mohamed**

Faculty

Alvarez, Carlos, M., Ph.D. *(University of Florida), Associate Professor, Psycho-Educational Services, Co-Director, International Education Center*

Baum, Rosemere, Ph.D. *(Pennsylvania State University), Assistant Professor, Vocational Education*

Bradley, Curtis H., Ed.D. *(Temple University), Associate Professor, Vocational Education*

Blucker, Judith A., Ph.D. *(Florida State University), Chairperson and Associate Professor, Subject Specializations; Director, Academic Affairs Council*

Campbell, Richard, Ed.D. *(Indiana University), Chairperson and Associate Professor, Childhood Education*

Carpenter, John A., Ph.D. *(University of Southern California), Dean, School of Education; Professor, Educational Leadership and Human Resources Development*

Chadwick, Ida F., Ph.D. *(Florida State University), Associate Professor, Health and Physical Education*

Cheyney, Wendy, Ed.D. *(University of Miami), Chairperson and Associate Professor, Psycho-Education Services*

Crabtree, Myrna P., Ed.D. *(Teachers College, Columbia University), Professor, Vocational Education*

Dempsey, Arthur, Ed.D. *(University of Arizona), Associate Professor, Childhood Education*

Divita, Charles, Jr., Ph.D. *(Florida State University), Chairperson, Educational Leadership and Human Resources Development*

Fain, Stephen M., Ed.D. *(Teachers College, Columbia University), Associate Professor, Educational Leadership and Human Resources Development.*

Farrell, Robert V., Ph.D. *(Teachers College, Columbia University), Associate Professor, Educational Leadership and Human Resources Development*

Fisher, Allen, Ph.D. *(University of Connecticut), Associate Professor, Educational Leadership and Human Resources Development*

Gallagher, Paul D., Ph.D. *(Florida State University), Associate Professor Educational Leadership and Human Resources Development*

Gavilan, Marisal, Ed.D. *(University of Tennessee), Associate Professor, Psycho-Educational Services*

Gay, Lorraine R., Ph.D. *(Florida State University), Associate Professor, Educational Leadership and Human Resources Development*

Greenberg, Barry, Ph.D. *(New York University), Associate Professor, Educational Leadership and Human Resources Development*

Gurucharri, Kathleen A., Ph.D. *(University of Miami), Associate Professor, Childhood Education*

Hauenstein, A. Dean, Ph.D. *(Ohio State University), Professor, Vocational Education; Director, Management Services*

Kampsnider, John J., Ph.D. *(University of Utah), Associate Professor, Educational Leadership and Human Resources Development*

Kennedy, Daniel A., Ed.D. *(University of Oregon), Associate Professor, Psycha-Educational Services*

Kossack, Sharon W., Ph.D. *(University of Georgia), Assistant Professor, Childhood Education*

Lazarus, Philip, Ph.D. *(University of Florida), Assistant Professor, Psycho-Educational Services*

Llewellyn, Jack H., Ph.D. *(Florida State University), Associate Professor, Health, Physical Education and Recreation*

Lopez, Richard, Ed.D. *(Florida Atlantic University), Assistant Professor, Health, Physical Education and Recreation*

Lucky, Luretha, Ed.D. *(Arizona State University), Assistant Professor, Psycho-Educational Services; Director, Urban Education Center*

McClintock, C. Edwin, Ed.D. *(University of Georgia), Associate Professor, Mathematics Education*

Margolin, Edythe, Ed.D. *(University of California), Professor, Childhood Education*

Martínez-Pérez, Luis A., Ph.D. *(Florida State University), Associate Professor, Science Education; Director, Title VII Bilingual Teacher Training Program and Multilingual Intercultural Education Center*

Mathewson, Grover, Ph.D. *(University of California at Berkeley), Associate Professor, Childhood Education*

Mendoza, Alicia, Ed.D. *(University of Miami), Assistant Professor, Childhood Education*

Faculty

Mohamed, Dominic A., Ph.D. *(University of Minnesota), Chairperson and Associate Professor, Vocational Education*

Morrison, George S., Ed.D. *(University of Pittsburgh), Professor, Childhood Education*

Nathanson, David E., Ph.D. *(University of Minnesota), Professor, Psycho-Educational Services; Director, Institute of Creative and Performing Arts for the Exceptional*

Oliva, Peter F., Ed.D. *(Teachers College, Columbia University), Professor, Educational Leadership und Human Resources Development*

Pearson, George B., Ed.D. *(University of Oregon), Professor, Health, Physical Education and Recreation*

Pell, Sarah W. J., Ed.D. *(Duke University), Associate Professor, Educationol Leadership and Human Resources Development*

Pennington, Clement, Ed. D. *(Pennsylvania State University), Assistant Professor, Art Education*

Perry, Ronald W., Ed.D. *(Louisiana State University), Assistant Professor, Parks and Recreation Management*

Pryor, Robert O., Ph.D. *(Florida State University), Assistant Professor, Vocational Education*

Reichbach, Edward M., Ed.D. *(Wayne State University), Associate Professor, Childhood Education*

Rembert, Emma W., Ed.D. *(Syracuse University), Associate Professor, Childhood Education*

Rosenberg, Howard, Ed.D. *(Teachers College, Columbia University), Assistant Professor, Psycho-Educational Services*

Ryan, Colleen A., Ph.D. *(Ohio State University), Associate Professor Psycho-Educational Services*

Sandiford, Janice R., Ph.D. *(Ohio State University), Assistant Professor, Vocational Education*

Shostak, Robert, Ph.D. *(University of Connecticut), Professor, English Education*

Smith, Donald C., Ph.D. *(Syracuse University), Professor, Psycho-Educational Services*

Sowards, G. Wesley, Ed.D. *(Stanford University), Professor, Distinguished Professor of Education, Educational Leadership and Human Resources Development*

Staczek, John J., Ph.D. *(Georgetown University), Associate Professor, Modern Language Education/TESOL; Director, General Management and Communication Services*

Stinson, John Jr., Ph.D. *(University of Connecticut), Assistant Professor, Childhood Education*

Strichart, Stephen S., Ph.D. *(Yeshiva University), Professor, Psycho-Educational Services*

Sullivan, Zola J., Ph.D. *(University of Illinois), Associate Professor, Childhood Education*

Sumner, Jack A., Ph.D. *(Kansos State University), Assistant Professor, Educational Leadership and Human Resources Development*

Teisolowski, Dennis G., Ed.D. *(Auburn University), Assistant Professor, Vocational Education*

Testa, Robert F., Ph.D. *(University of Miami), Associate Professor, Music Education; Director, Inservice Teacher Education*

Toomer, Jethro, Ph.D. *(Temple University), Associate Professor, Psycho-Educationol Services; Director, Student Personnel Services*

Tucker, Jan L., Ph.D. *(Indiana University), Professor, Social Studies Education; Co-Director, International Education Center*

Vanover, George W., Ed.D. *(University of Tennessee), Associate Professor, Vocational Education*

Vigilante, Nicholas J., Ph.D. *(Ohio State University), Professor, Childhood Education*

Wagner, Michael J., Ph.D. *(Florida State University), Associate Professor, Music Education*

Wells, James D., Ed.D. *(University of Florida), Associate Professor, Educational Leadership and Human Resources Development*

Wichowski, Chester P., Ed.D. *(Pennsylvania State University), Assistant Professor, Vocational Education*

Woods, Sandra L., Ed.D. *(Rutgers University), Assistant Professor, Psycho-Educational Services*

School of Hospitality Management

School of Hospitality Management

Gerald W. Lattin, *Dean*
Anthony G. Marshall, *Associate Dean and Professor*
William J. Morgan, Jr., *Professor*
Norman Ringstrom, *Professor*
Rocco Angelo, *Associate Professor*
Michael Hurst, *Professor*
Richard A. Huse, *Associate Professor*
Charles Ilvento, *Associate Professor*
Dennis A. Marzella, *Associate Professor*
Leonard Berkowitz, *Assistant Professor*
Percival Darby, *Assistant Professor*
Robert Daun, *Assistant Professor*
Fritz Hagenmeyer, *Associate Professor*
Elisa Moncarz, *Associate Professor*
Irving Sicherman, *Associate Professor*
Peter Martini, *Assistant Professor*
Steven Moll, *Instructor*
Edwin B. Dean, *Visiting Assistant Professor*
David Grier, *Visiting Assistant Professor*
Kevin Robson, *Assistant Professor*
Ted White, *Assistant Professor*
Marshall Kosiner, *Visiting Assistant Professor*
Donald Greenaway, *Visiting Distinguished Professor*
Lendal Kotschevar, *Visiting Distinguished Professor*
Norman Hall, *Assistant Professor*

The School of Hospitality Management offers bachelor's and master's programs that combine practical experience with classroom theory to assist the student to gain the understandings, skills, and techniques needed to qualify for job opportunities, or to achieve his or her career goals in the growing hospitality industry.

With the cooperation of industry executives, the School has created an internship program which literally utilizes the hotels, motels, restaurants, clubs, airlines, travel agencies and cruise lines as practice labs for students. The advanced phase of the internship program provides each student a structured and closely supervised management experience normally not available to a student until he or she has entered the industry after graduation.

An active *Industry Advisory Board*—which includes outstanding executives in the hotel, food and travel industries—works regularly with the faculty, staff and students of the School to formulate and update a curriculum that is current, flexible, and related to the needs of the hospitality industry.

The School has been designated a *Program of Distinction* by the Board of Regents.

Admission

UNDERGRADUATE

Any student who has completed two years of college (60 semester hours, 90 quarter hours) may apply for admission. Full credit will be granted for both *Associate of Arts* and *Associate of Science* degrees. One may enroll on either a full-time or part-time basis.

It is not necessary to have been previously enrolled in a hotel or restaurant program. The curriculum will provide the specialized professional education to equip the student for a career in hospitality management. Students with training in liberal arts, business, education, or technology, for example, are qualified to enroll in the program.

GRADUATE

Each candidate for admission to the graduate program must present his or her score on the Graduate Record Examination or the GMAT and proof of a bachelor's degree from an accredited institution.

To be admitted, a candidate must have maintained a "B" average in all upper divisional work *or* attain a minimum score of 1000 on the Graduate Record Examination (verbal and quantitative aptitude sections) *or* attain a minimum score of 450 on the GMAT.

The exact amount of additional work will vary with the undergraduate background of the candidate, but will not exceed 40 quarter hours including the required managerial internship program. A maximum of 15 quarter hours of graduate credit may be transferred from any other university or from the graduate programs of this University.

Additional information on admission procedures may be found in the Admission section of the Catalog.

SPECIAL STUDENTS

A number of persons currently employed in the hospitality field may not have the educational requirements to meet degree admission standards, but may be interested in enrolling in certain specific courses to improve their skills and to enhance their chances for promotion. Any person currently employed in the field may register as a *Special Student* for a maximum of 10 credit hours per quarter.

Undergraduate Study

Bachelor's degree programs are offered in general hospitality management; hotel and motel management; international hotel management; restaurant and food service management; tourism and travel management.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: Students should complete a minimum of 60 semester hours (90 quarter hours) including general education requirements. If a student has completed a minimum of 27 quarter hours of general education credits, it is still possible to be accepted into this program. However, the remaining general education requirements need to be completed prior to graduation from Florida International University. Listed below are courses recommended to enter this upper-division major.

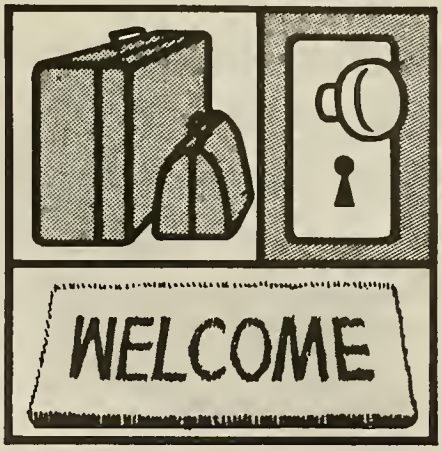
Recommended Courses:	Semester Hours
Accounting*	6
Psychology	3
Economics	3
Public Speaking	3

Remarks: *Accounting is a prerequisite for taking course work in the accounting and finance areas. The student who has not taken this prerequisite will be required to take this course during his or her first year at the University. Other recommended electives will not be required as part of the B.S. program.

UPPER DIVISION PROGRAMS:

(Continued)

General Hospitality Management



*General Hospitality Management

		Quarter Hours
Required Courses: Management Accounting Finance & Information Systems		
HFT 3453	Operations Control for Hospitality Industry Management	5
HFT 3423	Hospitality Accounting Information Systems	5
or		
HFT 3413	Lodging Systems & Procedures	5
HFT 4464	Interpretation of Hospitality Financial Statements	5
REE 4040	Intro. to Real Estate	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Food and Beverage Management		
FSS 3221	Introductory Commercial Service Production	
FSS 3234	Volume Feeding Management	5
HFT 3263	Restaurant Management	5
FSS 3243	Basic Meat Science	5
Administration		
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3945	Advanced Internship in Hospitality Management	5
HFT 3503	Marketing of Hospitality Services	5
HFT 3323	Physical Plant Management	5
HFT 3514	Advertising for Hosp. Ind.	5
Electives.		**30**
		100

*For students interested in Club Management, we have developed a special program within the General Hospitality Management major. The requirements are listed below:

Club Management Track

		Quarter Hours
Accounting and Finance		
HFT 3423	Hospitality Accounting Information Systems	5
HFT 4455	Functions of the Hospitality Comptroller	5
HFT 4464	Interpretation of Hospitality Financial Statement	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Food and Beverage Management		
FSS 3221	Introductory Commercial Food Service Production	5
FSS 3234	Volume Feeding Management	5
FSS 3243	Basic Meat Science	5
HFT 3263	Restaurant Management	5
Administration		
HFT 3434	Club Operations Management	5
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3503	Marketing of Hospitality Services	5
HFT 3514	Advertising for the Hospitality Industry	5
HFT 3323	Physical Plant Management	5
HFT 3941	Internship in Hospitality Management	5
HFT 3945	Advanced Internship in Hospitality Management	5
ARC 4354C	Construction and Design of Natural Recreation Areas	5
ORH 3220	Turf Grass Management	5
Electives		**15**
		100

Hotel and Motel Management

Restaurant and Food Service Management

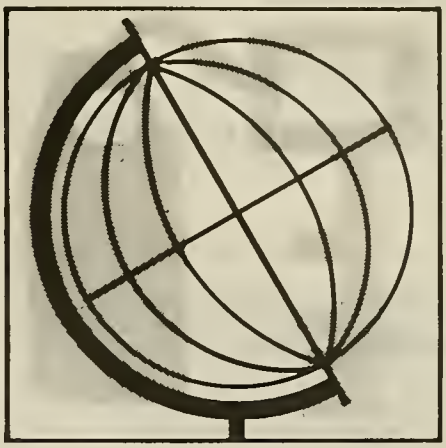
Hotel and Motel Management

		Quarter Hours
Required Courses: Management Accounting, Finance & Information Systems		**25**
HFT 3453	Operations Control for Hospitality Industry Management	5
HFT 3423	Hospitality Accounting Information Systems	5
or		
HFT 3413	Lodging Systems & Procedures	5
HFT 4464	Interpretation of Hospitality Financial Statements	5
REE 4040	Intro. to Real Estate	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Food and Beverage Management		**20**
FSS 3221	Introductory Commercial Food Service Production	5
FSS 3234	Volume Feeding Management	5
HFT 3263	Restaurant Management	5
FSS 3243	Basic Meat Science	5
Administration		**30**
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3941	Internship in Hospitality Management	5
HFT 3945	Advanced Internship in Hospitality Management	5
HFT 3503	Marketing of Hospitality Services	5
HFT 4234	Union Management Relations in the Hospitality Industry	5
HFT 3514	Advertising for the Hospitality Industry	5
Electives:		**25**
		100

Restaurant and Food Service Management

		Quarter Hours
Required Courses: Management Accounting, Finance & Information Systems		**15**
HFT 3423	Hospitality Accounting Information Systems	5
HFT 4464	Interpretation of Hospitality Financial Statements	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Food and Beverage Management		**25**
FSS 3221	Introductory Commercial Food Service Production	5
FSS 3234	Volume Feeding Management	5
HFT 3263	Restaurant Management	5
FSS 3243	Basic Meat Science	5
FSS 4105	Purchasing and Menu Planning	5
Administration		**35**
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3941	Internship in Hospitality Management	5
HFT 3945	Advanced Internship in Hospitality Management	5
HFT 3503	Marketing of Hospitality Services	5
HFT 3514	Advertising for Hosp. Ind.	5
HFT 3323	Physical Plant Management	5
HFT 4234	Union Management Relations in the Hospitality Industry	5
Electives: (Five hours must be taken in either FSS 3232 or FSS 4431)		**25**
		100

International Hotel Management



International Hotel Management

		Quarter Hours
Required Courses: Management Accounting, Finance & Information Systems		**20**
HFT 3453	Operations Control for Hospitality Industry Management	5
HFT 3423	Hospitality Accounting Information Systems	5
or		
HFT 3413	Lodging Systems & Procedures	5
HFT 4464	Interpretation of Hospitality Industry Financial Statements	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Food and Beverage Management		**15**
FSS 3221	Introductory Commercial Food Service Production	5
FSS 3234	Volume Feeding Management	5
HFT 3263	Restaurant Management	5
Administration		**35**
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3941	Internship in Hospitality Management	5
HFT 3945	Advanced Internship in Hospitality Management	5
HFT 3503	Marketing of Hospitality Services	5
HFT 3514	Advertising for Hospitality Industry	5
HFT 3323	Physical Plant Management	5
HFT 3713	International Travel and Tourism	5
Electives:		**30**
		100

Tourism and Travel Management

Tourism and Travel Management

		Quarter Hours
Required Courses: Management Accounting, Finance & Information Systems		**15**
HFT 3423	Hospitality Accounting Information Systems	5
or		
HFT 3413	Lodging Systems & Procedures	5
HFT 4465	Interpretation of Travel and Tourism Management Financial Statements	5
HFT 4474	Profit Planning and Decision-Making in the Hospitality Industry	5
Administration		**25**
HFT 3603	Law as Related to the Hospitality Industry	5
HFT 3000	Introduction to Hospitality Management	5
HFT 3503	Marketing of Hospitality Services	5
HFT 3514	Advertising for Hospitality Industry	5
HFT 4234	Union Management Relations in the Hospitality Industry	5
Travel and Tourism Management		**35**
HFT 3700	Fundamentals of Tourism	5
HFT 3722	Retail Travel Agency Management	5
HFT 3753	Convention and Trade Show Management	5
HFT 3713	International Travel and Tourism	5
HFT 3941	Internship in Hospitality Management	5
HFT 3945	Advanced Internship in Hospitality Management	5
GEA 3000	World Regional Geography	5
Electives: (Five hours must be taken in transportation)		**25**
		100

Hotel and Food Service Management

Graduate Study Hotel and Food Service Management

LOCATION: Tamiami Campus only

DEGREE: *Master of Science in Hotel and Food Service Management*

		Quarter Hours
Required Core Courses:		30
HFT 6246	Organizational Behavior in the Hospitality Industry	5
HFT 6586	Research and Statistical Methods	5
HFT 6477	Financial Management for the Hospitality Industry	5
HFT 6296	Seminar in Hospitality Management	5
HFT 6697	Hospitality Law Seminar	5
HFT 6916	Hospitality Industry Project	5
Electives: (5000 and 6000 level)		20
		50

Course Descriptions

Definition of Prefixes

FOS–Food Science; FSS–Food Service Systems; HFT–Hospitality, Food, Tourism.

UNDERGRADUATE

FOS 4201 Sanitation in Food Service Operation (5)

The causes and prevention of food poisoning are stressed. Emphasis is placed on the current problems confronting the industry, with recent food developments as they relate to sanitation. Curriculum developed by the National Sanitation Foundation is included.

FSS 3221 Introductory Commercial Food Service Production (5)

Provides an introduction to commercial food preparation, nutrition, standard product identification, storage and supervisory techniques in the area of food preparation. Course includes classroom instruction, demonstrations and actual cooking experience.

FSS 3232 Intermediate Quantity Food Production Techniques (5)

An advanced commercial food production course which provides the student with the opportunity to achieve competence and to develop techniques in the garnishing, pastry, serving, and convenience food areas. Prerequisite: FSS 3221 or equivalent.

FSS 3234 Volume Feeding Management (5)

The facilities of various types of large quantity food operations are utilized, to provide the student with both production and managerial experience. Students will be rotated through production stations and, as managers, will be required to plan menus, supervise preparation and service, handle customer relations and keep accurate accounting records on the profit and loss phases of the operation. Staffing, merchandising and cost control procedures are integral parts of the course. Prerequisite: FSS 3221 or equivalent.

FSS 3241 Classical Cuisine (5)

Provides an opportunity for students skilled in cookery to expand their knowledge of food preparation into the area of world-respected, traditional dishes. The course includes lecture, demonstration, and actual preparation of classical dishes. The students will utilize conventional methods of preparation as well as convenience foods. Prerequisite: FSS 3221.

FSS 3243 Basic Meat Science (5)

Fundamentals of meat: quality yield, utilization of cuts, availability, costing, buying, inventorying, packaging, labor, and trends.

FSS 3272 Beverage Management (5)

An introduction to the identification, use and service of wines and other alcoholic beverages, with an in-depth analysis of the various elements of beverage operations including purchasing, control, merchandising, and bar management. Field trips are made to hotels and restaurants to demonstrate salient operating principles.

FSS 3273 Wine Technology, Merchandising and Marketing (5)

A course in the fundamentals of wine technology (vitaculture and vinification methods). The major types of wine and the factors influencing their quality; principles of sensory evaluation; wine merchandising and marketing.

FSS 4105 Purchasing and Menu Planning (5)

Basic information on sources, grades and standards, criteria for selection, purchasing, and storage for the major foods, including the development of specifications. Consideration of the menu pattern with particular emphasis on costing, pricing, and the work load placed on the production staff. Item analysis and merchandising features are emphasized.

FSS 4245 Advanced Meat Science (5)

An advanced course which considers the variable factors of meat, poultry and fish utilization. Emphasis is placed upon newer techniques in purchasing, maximizing yields, and providing products in unique form. The use of TVP and other analogs is considered, as are the functions of the specialized commissary-type of meat processing plants. Guest speakers will be utilized, and field trips to protein processing plants will be made, to emphasize major points. Prerequisite: FSS 3243.

FSS 4315 Institutional Food Service Management (5)

This course brings together basic management techniques and controls that are useful in the area of institutional feeding programs. Federal and state government regulations are studied. Special emphasis is given to hospital food service direction and the National School Lunch Program.

FSS 4333 In-Flight Food Service Management (5)

An introduction to the concepts and managerial techniques specifically related to the in-flight food service segment of the hospitality industry. Students will be exposed to a comprehensive study of contract purchasing, contract negotiations, system menu planning, volume food production, staff scheduling, industry pricing methods, product specification factors, client and employee relations, and security control systems; and familarized with specific and specialized food service equipment, equipment routing and balance, and transportation methods and procedures.

FSS 4431 Food Facility Layout and Design (5)

Defines and explains concepts, principles and procedures in evaluating and/or developing varied commercial food service facilities that will increase profit by reducing investment and operating cost and/or by increasing capacity. Actual installations are intensively reviewed. Current trends in food service methodology and technology are studied in detail, and food service equipment manufacturing processes and distribution economics are observed and evaluated.

(Continued)

Hospitality Management

FSS 4614 Food and Beverage Merchandising (5)
This is an application of marketing and advertising principles to the specific area of food and beverage for hotels and restaurants.

FSS 5361 Advanced Food Service Operation (5)
A senior course designed to coordinate the various management functions covered in previous courses into a comprehensive approach to profitable food service operations.

FSS 6365 Food Service Systems (5)
Principles of system analysis applied to the food service industry. Attention is given to the organization of modern food production, preparation, and distribution systems. Case study problems require application of economic and management principles for solution.

FSS 6452 Advanced Food Service Design Operations (5)
Advanced planning, programming and project documentation for commercial food service facilities. Spatial, environmental and electromechanical design factors are stressed, with particular emphasis on efficiency modulation and investment aspects. Recommended: HFT 3343 or FSS 4431.

FSS 6834 Food Service Research (5)
The planning, executing, and reporting of an individual research project dealing with significant problems in food service. Students demonstrate an understanding of research techniques through data collection, evaluation and interpretation.

HFT 3000 Introduction to Hospitality Management (5)
A survey course providing an overview of the industry: its history, problems and general operating procedures. Operating executives from the fields of hotel, restaurant, food service, travel and tourism will be featured periodically.

HFT 3203 Fundamentals of Management in the Hospitality Industry (5)
A basic course in general management to acquaint the student with theories and principles of organization, the tools of managerial decision-making, and the management process, with particular reference to the hospitality industry.

HFT 3263 Restaurant Management (5)
An analysis of the principal operating problems in the restaurant field. Procedures, approaches and techniques of management are explored and developed as they relate to the various categories of restaurants ranging from fast food to gourmet. Industry leaders will present successful concepts of restaurant operation.

HFT 3313 Hospitality Property Management (5)
The problems of cost and operation of pest control, security, parking, general cleaning and upkeep, laundry, fire prevention, pools, tennis courts and care of guest rooms and public space, with emphasis on equipment, personnel, and modern innovations.

HFT 3323 Physical Plant Management (5)
A comprehensive survey of engineering, maintenance and efficiency control in hotels, restaurants and institutions.

HFT 3343 Hotel and Restaurant Planning and Design (5)
Considers analysis, evaluation and scheduling of the economic, technical, aesthetic and merchandising factors involved in the planning, programming and design stages of hotels and restaurants. Actual hotel and restaurant projects will serve as the basis for discussion and student project work.

HFT 3403 Introduction to Management Accounting for the Hospitality Industry (5)
Introduction and practice in accounting processes, and the principles of hospitality management accounting. Prepares the student for work in advanced accounting and financial management. Required for students who have not completed an introductory accounting course.

HFT 3413 Lodging Systems and Procedures (5)
Detailed examination of the functions and procedures utilized in servicing the guest of a lodging establishment, contrasting traditional techniques and modern systems. Extensive use of the School's Mobydata minicomputer hospitality system to demonstrate "state-of-the-art" concepts. Prerequisite: HFT 3403.

HFT 3423 Hospitality Accounting Information Systems (5)
The study of an accounting system for hospitality operations within the context of the firm's overall information system. The flow of data from source inputs through financial statement preparation, with emphasis on computer assisted processing and reporting techniques. Students use the University computer for a case project. Prerequisite: HFT 3403.

HFT 3434 Club Operations Management (5)
Lecture, discussion, case studies and field trips specifically designed to expose the future club manager, golf professional and turf manager to club operations. Introduction to the uniform system of accounts for clubs, annual club studies for operating results, control systems, taxation, budgeting and management reports.

HFT 3453 Operations Control for Hospitality Industry Management (5)
Study of the management tools available to control sales and expenses within hospitality operations. Detailed analysis of the responsibility centers using a cost managing approach. Case problems provide the students the opportunity to develop control systems for food and lodging organizations.

HFT 3503 Marketing of Hospitality Services (5)
Application of marketing principles to business operations within the hospitality industry, with particular emphasis on viewing marketing as a competitive strategy in domestic and international markets.

HFT 3514 Advertising for the Hospitality Industry (5)
Consideration of all aspects of the advertising element of the promotion mix to execute the corporation's or tourist destination's marketing strategy. Prerequisite: HFT 3503.

HFT 3524 Sales Management for the Hospitality Industry (5)
The course focuses on organizing sales and servicing effort and executing marketing strategy by developing sales strategies, plans and tactics for hospitality corporations and tourist destinations. Special emphasis is placed on group markets and gaining travel retailer support for destinations, hotel corporations and cruiselines. The course may be followed by a sales management internship. Prerequisite: HFT 3503.

HFT 3603 Law as Related to the Hospitality Industry (5)
A basic course in hotel, motel and restaurant law. The student is introduced to the fundamental laws, rules and regulations applicable to the hospitality industry. The case study approach is used to develop an awareness and understanding of the legal problems confronting the executive in his policy and decision making role.

HFT 3700 Fundamentals of Tourism (5)
An introduction to the broad fields of travel and tourism. Among the topics covered are cultural tourism, sociology of tourism, tourism components and supply, tourism development, the economic role of tourism demand, and the marketing of tourism.

(Continued)

Hospitality Management

HFT 3713 International Travel and Tourism (5)
An introduction to the complete international scope of travel and tourism. A brief analysis of regional framework and specific regions of the world, the interrelationship between human society and the physical environment. Tourism as a factor in economic development and its cultural and sociological factors are explored. An analysis of the international organization of tourism and the facilitation procedures required for its successful implementation are highlighted.

HFT 3722 Retail Travel Agency Management (5)
An introduction to the basic operations aspect of travel agency management. The application of fundamental principles and successful practices in developing a satisfied clientele.

HFT 3727 Technical Agency Operations (5)
Comprehensive, detailed course covering the technical procedures, practices and systems of day-to-day travel management, the counseling, sales and personal relationships with clients, hotels, tour agencies and transportation systems. Prerequisite: HFT 3722.

HFT 3733 Creative Tour Packaging (5)
A thorough study of the functions of the wholesale tour operation. Includes tour operations and development, sales methods used in selling group business, costing and contracting of group business, and in-depth study of the promotional aspects of tour packaging.

HFT 3753 Convention and Trade Show Management (5)
A course concentrating on organizing, arranging and operating conventions, trade shows, and concessions. Emphasis will be placed on the modes and methods of sales used in booking conventions and trade shows, as well as the division of administrative responsibility in their operation.

HFT 3763 Passenger Traffic Management (5)
A survey of land, water and air transportation from an integrated, intermodal frame covering organization, operations, financing, research, regulation, economics and certain social and political factors, as well as contributions made by each mode to the development of tourism.

HFT 3793 Sociology of Leisure (5)
An introduction to the fundamental, psychological and sociological concepts and theories as they relate to the motivation behind travel and tourism.

HFT 3900–3905 Independent Studies (VAR)
With permission from the Chairperson of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.

HFT 3941 Internship in Hospitality Management (5)
Experience in all the major phases of hospitality operations. Reports are required.

HFT 3945 Advanced Internship in Hospitality Management (5)
Structured management experience in a specialized career in the hospitality industry. Programs include: food and beverage management, rooms division management, sales management, in-flight catering management, fast food service management and restaurant management. Structured management experience with an airline, a travel agency, a tour operator or a cruiseline. Report required.

HFT 4224 Human Relations in the Hospitality Field (5)
The problems faced by the supervisor and the executive in managing the human element in the hospitality field. Designed to give the student insight into the varied social and psychological factors present in any employee-employer relationship.

HFT 4234 Union Management Relations in the Hospitality Industry (5)
A comprehensive course covering labor legislation, union history and the day-to-day administration of the labor contract. Emphasis is placed on collective bargaining and the business relationships between union and management.

HFT 4276 Resort Management (5)
A course designed to focus on the unique problems of resort hotel management and the application of special techniques to meet these problems.

HFT 4293 Restaurant Management Seminar (5)
By permission of instructor only. A senior course reviewing current problems and practices, developing policies and procedures and implementing same.

HFT 4444 Computer Systems for Hospitality Industry Management (5)
A seminar on computer systems and their applications within the hospitality industry. Consideration is given to an understanding of the basic computer hardware and software concepts needed for a manager to communicate with data processing personnel. Prerequisite: HFT 3423.

HFT 4455 Functions of the Hospitality Industry Comptroller (5)
A specialized course designed for students desiring strong emphasis and training in the complex accounting and finance functions of hospitality industry management. Prerequisites: HFT 3423, HFT 3453

HFT 4464 Interpretation of Hospitality Industry Financial Statements (5)
In-depth study of hospitality industry financial statements including consideration of the significant relationships between the various accounts found on financial reports. The statement of changes in financial position is studied, emphasizing funds as a means of payment. Major emphasis is placed upon trend analysis, ratio analysis and comparison analysis using hospitality industry annual studies. Prerequisites: HFT 3453, HFT 3423, HFT 3413.

HFT 4474 Profit Planning and Decision Making in the Hospitality Industry (5)
Study of the decision-making process involved in the development of profit plans through analysis of hospitality industry studies. The establishment of short and long term goals and the means to reach these goals through profit plans. Emphasis on pricing decisions, responsibility centers, variance analysis, cost-volume profit analysis, capital budgeting and tax considerations. Prerequisites: HFT 4464.

HFT 4485 Seminar in Tax Planning for the Hospitality Industry (5)
Develops tax awareness and the ability to recognize the possible tax implications of business decisions. Tax considerations are studied for existing, expanding and planned hospitality operations. Included are compensation plans, pension and profit sharing plans, depreciation methods, acquisitions, mergers, liquidations, organization structure, accounting methods and capital gains and losses. Prerequisite: Permission of the instructor.

HFT 4494 Seminar in Hospitality Information Systems (5)
A study of the information systems utilized in hospitality operations to provide better management information for analysis and decision-making. Industry participants afford students the opportunity to study and evaluate their information system. This forms the basis for their course project. Research, case problems, class analysis and discussion. Prerequisite: Permission of the instructor.

(Continued)

Hospitality Management

GRADUATE

HFT 5476 Feasibility Studies for the Hospitality Industry (5)
A survey of various theories and techniques available by which management may determine the financial feasibility of investments in the hospitality field. Prerequisites or Corequisites: HFT 3503, HFT 4474.

HFT 5495 Seminar in Hospitality Industry Financial Management Systems (5)
Visits to various hospitality businesses for seminars with management team members. Lectures, demonstrations and discussion of each operation's methods and procedures, with emphasis on accounting and control systems. Prerequisite: Permission of the instructor.

HFT 5595 Problems in Marketing (5)
Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator. Prerequisite: HFT 3503.

HFT 5901, 5906, 5911 Independent Studies (VAR)
With permission from the Chairperson of the Division of Hotel and Restaurant Services, or Division of Travel Services, students may engage in independent research projects and other approved phases of independent study.

HFT 6226 Motivation and Leadership (5)
Study of motivation, perception, learning, attitude formation, incentive theory, and job satisfaction, with emphasis on leadership and group task performance.

HFT 6246 Organizational Behavior in the Hospitality Industry (5)
A survey of the concepts of organizational behavior and industrial psychology theory, from both the research and practical points of view. The course is designed to assist students in making sound decisions in the hospitality area by making them sensitive to the organizational parameters which influence their decisions.

HFT 6256 International Hotel Operations (5)
A consideration of the various environments within which the international hospitality firm operates. Organizational, financial and marketing factors are of major concern. Emphasis is placed on those problems and constraints which are uniquely different from problems of firms engaged in domestic operations of a similar nature.

HFT 6286 The Organization and its Environment (5)
A study of the hospitality industry as it is affected by its environment and in turn attempts to influence the various elements in this environment.

HFT 6296 Seminar in Hospitality Management (5)
Attention is focused on major problems facing management in today's economy. Special emphasis is placed on the food service industry. Research of the current literature, class analysis and discussion.

HFT 6297 Seminar in Management Methods (5)
Class will be divided into small groups, each of which will meet regularly with the executive committee of an area hotel or restaurant. Each group will be, in reality, the junior executive committee for the property. The groups will come together periodically for analysis and discussion of their experiences, and to relate their experiences to principles of modern management.

HFT 6446 Hospitality Industry Organizational Information Systems (5)
Study of information systems in the hospitality industry. Consideration of the design and development of an information system based on user needs. Emphasis on identification and specification of user requirements and the selection of the appropriate design. Students work on a systems development project.

HFT 6456 Operations Control (5)
Focus is directed to the information used in the decision process and the information flow associated with each decision process throughout hotel or restaurant enterprises.

HFT 6477 Financial Management for the Hospitality Industry (5)
A study of the principles of financial management and their application to the hospitality industry. Discussion and case studies are used to develop plans for meeting financial needs (short, intermediate and long term) from internal sources or capital markets. Attention is focused on capital budgeting, leasing, franchising, mergers, consolidations and current financial issues in the hospitality industry.

HFT 6486 Investment Analysis for the Hospitality Industry (5)
Advanced investment methods and opportunities with emphasis on securities of the hospitality industry, financing techniques, syndication, negotiations.

HFT 6487 Taxation Federal and State (5)
A study of state and federal taxation concepts, including tax management for individuals, partnerships, and corporations engaged in the hospitality field.

HFT 6586 Research and Statistical Methods (5)
A study of basic research methodology as applied to a variety of hospitality industry research projects. Techniques for data collection, and interpretation, and methods of reporting are considered.

HFT 6596 Marketing Management (5)
Team-work analysis and recommended solution of an actual marketing problem which has been posed by a local operator.

HFT 6697 Hospitality Law Seminar (5)
New laws and their impact on the hospitality industry are examined. Students research and publish "industry alert bulletins," explaining the impact of new legislation on the hospitality industry. Prerequisite: HFT 3603 or equivalent.

HFT 6916 Hospitality Industry Project (5)
An individualized research project dealing with current problems in the hospitality industry. Topics and research methods must be approved by the graduate faculty before registration for the course.

HFT 6946 Graduate Internship (5)
Structured graduate management experience in a specialized career in the hospitality industry. Programs include: food and beverage management, rooms division management, sales management, in-flight catering management, fast food service management and restaurant management. Prerequisite: Permission of the instructor.

Faculty

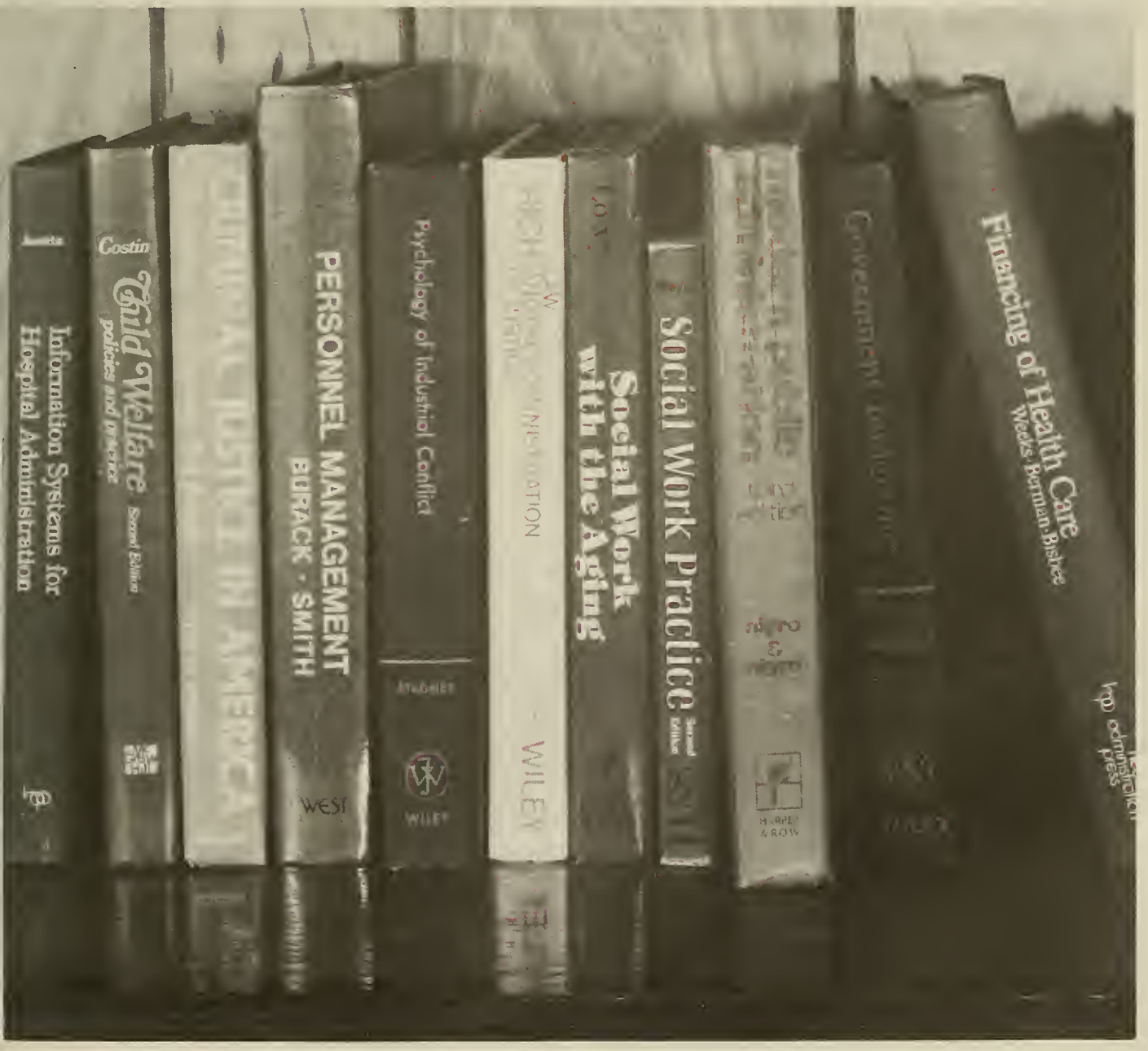
School of Hospitality Management

Dean **Gerald W. Lattin**
Associate Dean, Chairperson of Hotel and Food Service Management **Anthony G. Marshall**

Faculty

Angelo, Rocco M., B.S. (*Cornell University*), *Associate Professor, Management*
Berkowitz, Leonard, B.A. (*University of Maine*), *Visiting Assistant Professor, Meat Sciences*
Darby, Percival, M.S. (*Florida International University*), *Assistant Professor, Counseling and Placement*
Daun, Robert E., M.B.A. (*Florida International University*), *Assistant Professor, Accounting*
Dean, Edwin, *Visiting Assistant Professor, Union/Management Relations*
Greenaway, Donald, Ph.D., *Washington State*
Grier, David R., *Visiting Assistant Professor, Beverage Management*
Hagenmeyer, Fritz, G., M.A. (*Cornell University*), *Associate Professor, Hotel Engineering*
Hall, Norman, M.S. *(Rutgers University)*
Hurst, Michael E., M.A. (*Michigan State University*), *Professor, Hotel and Restaurant Management*
Huse, Richard A., M.S. (*Niagara University*), *Associate Professor, Travel and Tourism*
Ilvento, Charles L., M.B.A., C.P.A. (*Cornell University*), *Associate Professor, Accounting and Information Systems*
Kosiner, Marshall S., *Visiting Assistant Professor, Tourism*
Kotschevar, Lendal, Ph.D., (*Columbia University*)
Lattin, Gerald W., Ph.D. (*Cornell University*), *Dean, School of Hospitality Management, Professor, Management*
Marshall, Anthony G., J.D. (*Syracuse University*), *Associate Dean, School of Hospitality Management, Professor, Law and Finance*
Martini, Peter C., M.S. (*Florida International University*), *Assistant Professor, Food Management*
Marzella, Dennis A., M.B.A. (*Michigan State University*), *Associate Professor, Marketing*
Moll, Steven V., M.S. (*Florida International University*), *Instructor, Accounting*
Moncarz, Elisa, B.B.A., C.P.A. (*Bernard/Baruch College, City U. of New York*), *Associate Professor, Accounting and Information Systems*
Morgan, William J., Jr., Ph.D. (*Cornell University*), *Professor, Hotel and Restaurant Management*
Ringstrom, Norman H., Ph.D. (*State University of Iowa*), *Professor, Hotel Management*
Sicherman, Irving, M.S., C.P.A. (*Columbia University*), *Associate Professor, Accounting*
White, Theodore, *Assistant Professor, Club Management*

School of Public Affairs and Services



School of Public Affairs and Services

The School of Public Affairs and Services offers programs of professional study which provide academic and applied courses for students interested in public and non-profit organizational needs, management and research. Emphasis is placed on achieving a comprehensive, developmental and community oriented understanding of problems, issues, alternatives and needs of an urban society faced with rapidly changing social, political, economic and cultural conditions.

The departments of the School of Public Affairs and Services are: Criminal Justice, Health Services Administration, Public Administration and Social Work. Each of these Departments offers the baccalaurate degree, and a masters degree is offered by the Departments of Criminal Justice, Public Administration and Health Services Administration. A Master of Social Work degree is in the planning stages.

I. ADMISSION REQUIREMENTS UNDERGRADUATE AND GRADUATE
Policies on admissions and prerequisites for the graduate and undergraduate programs are described in the appropriate departmental sections of this catalog.

II. ADVISEMENT
Each student is assigned a faculty advisor upon being admitted to a program and together the student and the advisor plan the student's program of study. Students needing pre-advisement should contact the specific department.

III. CLINICAL AND FIELD EXPERIENCES
As an integral part of the program curriculum, the student may be provided supervised learning experiences in community service agencies. The clinical and field work experience is one of orientation, observation and practice in the particular programs specialty of public affairs and is structured concurrently with relevant classroom experiences. Numerous community organizations provide opportunities for student internships and field practices.

IV. EXTERNAL DEGREE PROGRAM
The External Degree program is a self-directed, non-campus residential program for residents of Florida. The program enables the student to take advantage of all educational resources throughout Florida, without requiring his or her residence on any campus. On admission, the student's previous academic training and life experiences are summarized and individual study plans are designed for each student in the form of an educational contract. Not all departments offer the external degree option and each should be contacted for further information.

V. CONTINUING EDUCATION AND SPECIAL PROGRAMS
The School of Public Affairs and Services, in cooperation with the Division of Continuing Education, offers many credit, non-credit and workshop courses in Off-Campus locations in Dade, Broward and Monroe Counties. Courses and locations vary quarterly and the departments should be contacted for specific offerings.

VI. GRADING SYSTEMS
Course work in the School of Public Affairs and Services is generally graded on the letter system: A, B, C, D or F. Certain clinical or field experience program courses award a grade of CR (Credit) or NC (No Credit). A grade of IN (Incomplete) may be awarded at the discretion of the instructor with specific time limitation imposed on the completion of the required work. Individual programs may have specific requirements regarding grades earned in required program of study courses. Undergraduate students must achieve an overall grade point average of 2.0 in order to graduate. Graduate students must maintain a grade point average of 3.0 in order to graduate.

Criminal Justice

Robert Snow, *Associate Professor, Chairperson*
Harcourt Clark, *Assistant Professor*
Robert Clark, *Professor*
Ralph Lewis, *Associate Professor*
Jose Marques, *Associate Professor*
Regina Shearn Perry, *Associate Professor*
Luis Salas, *Assistant Professor*
Ronald Schneider, *Assistant Professor*
Jack Tuckfield, *Assistant Professor*
William Wilbanks, *Associate Professor*

Criminal Justice is an area of study dealing with the formal mechanisms of social control by which our society exercises constraint over its members. The study of criminal justice is an interdisciplinary one; i.e., it involves law and the social/behavioral sciences. It is concerned with the primary means of social control—the law. It involves the study of crime, the reaction of society to this major social issue, and the instrumentalities utilized in treating the problem. Heavily intertwined throughout the entire approach is the pervading issue of social justice.

A wide variety of career opportunities are available in criminal justice at all levels of government. Due to its interdisciplinary approach, the study of criminal justice fills the needs of students seeking careers in teaching, research, law, and the various criminal justice occupations.

LOCATION: North Miami Campus
Courses may be offered on the Tamiami Campus or other locations.

DEGREE: *Bachelor of Science in Criminal Justice*

LOWER DIVISION PREPARATION:

Required Courses: None

Remarks: The student majoring in Criminal Justice should consult with an academic advisor to ensure that the actual courses selected (1) meet program and degree requirements, and (2) are consistent with the individual's long range academic and career objectives.

Recommended Courses: 1. The student intending to enroll in the Criminal Justice program is urged to complete an Associate of Arts degree at the lower division. An entering student is not required to have been enrolled in a pre-criminal justice program. A student having an Associate of Science degree or 90 quarter hours will also be accepted, but must complete general education requirements before the bachelor's degree can be awarded.

UPPER DIVISION PROGRAM:

Core Courses: Six courses are required for every student in Criminal Justice. A core course requirement can only be waived by the Chairperson with the recommendation of the student's faculty advisor.

The core courses are:

CCJ 3020	Overview of Criminal Justice Systems	5
CCJ 3100	Law Enforcement Systems	5
CCJ 3290	Judicial Policy Making	5
CCJ 3300	Correctional Philosophy	5
CCJ 3600	Nature and Causes of Crime	5
CCJ 3700	Methods of Criminal Justice Research	5
Area of Interest: See explanation below[1]		20
Specific Electives: See explanation below[2]		15
General Electives: See explanation below[3]		25

[1] *Area of interest:* 20 quarter hours at the 3000 level or above in criminal justice are required

(Continued)

Criminal Justice

for criminal justice majors. Only 10 quarter hours of CCJ 4940 will count toward this requirement.

[2] *Specific electives:* 15 quarter hours at the 3000 level are required in sociology-anthropology, social work, psychology, political science, computer science or statistics. Any combination of these courses is acceptable.

[3] *General electives:* 25 quarter hours are required. No more than 15 hours can be criminal justice courses. Relevancy of elective courses will be determined in consultation with the student's advisor or the Chairperson. The faculty retains the prerogative to accept or reject electives taken without approval.

Remarks:

(1) Independent study and directed readings courses may not be taken outside of the Criminal Justice Department except with written permission of the Criminal Justice Chairperson.

(2) Course work from disciplines outside of Criminal Justice will not be accepted to fulfill requirements in the Criminal Justice area of interest category.

(3) Students are required to maintain a minimum G.P.A. of 2.0 in the CCJ Area of Interest and Core Courses.

Program Honors:

Students may qualify for program honors if they meet the University academic honors requirements and have a GPA of 3.5 in their criminal justice courses. Students may qualify for program high honors if they meet University honors requirements for high honors, have a GPA of 3.75 in the criminal justice courses, and orally present a paper from CCJ 4910 to a faculty committee. Any student applying for these awards must take all of his/her criminal justice courses at FIU. Those applying for program honors must complete an application before *the end of the second week of the quarter in which graduation is expected.* Candidates for high honors must complete an application by *the end of the third week of the second quarter before graduation.*

The CCJ 4910 paper must be completed by the end of the second quarter prior to graduation. This means that CCJ 4910 cannot be taken the last quarter if it is to be used for the purposes of obtaining high honors.

Anyone intending to apply for high honors must interest a designated faculty member in accepting him/her as an enrollee in CCJ 4910 for this purpose. An Approval Form for Independent Study can be obtained from the program office by a candidate before requesting consideration as a prospective high honors student.

Transfer Credit

A student transferring from a four year college may transfer up to 130 quarter hours into the Criminal Justice Program; however, the student must still have 90 quarter hours at the 3000 level or above. All work transferred to FIU is subject to review and approval by the Criminal Justice Chairperson. Criminal Justice courses completed with a grade of "D" will not be transferred.

Double Majors and Degrees

Students must complete the core courses (30 hours) plus 20 additional hours in Criminal Justice in order to:

1) Satisfy Criminal Justice requirements for a double major

2) Obtain a second degree with a major in Criminal Justice

3) Obtain two baccalaureate degrees simultaneously (provided requirements for two majors have been completed as certified by the appropriate academic units, and a minimum of 45 appropriate quarter hours beyond the requirements of one degree have been earned).

CRIMINALISTICS-CHEMISTRY PROGRAM

Criminalistics-Chemistry Core Requirements: Same as requirements for a bachelor's degree in chemistry. (Degree granted by Department of Physical Sciences).

Chemistry Electives: If the student chooses the BA degree in Chemistry, he/she should elect at least one of the following:

CHM 4490	Advanced Spectroscopy and Molecular Structure	5
CHM 4130, 4130L	Modern Analytical Chemistry	7

Internship: A 5–10 credit internship in the laboratory of a participating criminal justice agency.

Criminal Justice Coursework: The student should elect 15 credits of criminal justice courses in consultation with an advisor in the Department of Criminal Justice.

Electives: Coursework in the behavioral and political sciences, as well as upper division coursework in the biological sciences, is recommended to total 90 quarter hours.

Course Descriptions

Definition of Prefixes

CCJ–Criminology and Criminal Justice.

CRIMINAL JUSTICE CORE COURSES

CCJ 3020 An Overview of Criminal Justice Systems (5)
A survey of the agencies and processes involved in the administration of justice. Interrelationships and functions of the legislature, police, prosecutor, defender, courts, and corrections are examined.

CCJ 3100 Law Enforcement Systems (5)
A conceptual study of the American police system.

CCJ 3290 Judicial Policy Making (5)
An analysis of judicial systems and their legal, social and political environments. Interrelationships between the prosecutorial and other criminal justice substructures will be examined.

CCJ 3300 Correctional Philosophy, Theory and Practice (5)
Appraisal of correctional methods utilized in the United States and other countries. Prisons, probation, parole, work-release programs, halfway houses, community-based correction programs and other techniques are analyzed.

CCJ 3600 The Nature and Causes of Crime (5)
Social cultural, behavioral, political and economic causitive factors in the development of crime. Psychological and sociological considerations involved in criminal behavior. The role of the legislature as policy maker in criminalizing conduct, and the limits of the criminal sanction.

CCJ 3700 Methods of Criminal Justice Research (5)
Elements of scientific perspective, interaction of research theory and practice. Research design, data collection, analytic and statistical techniques, use of data processing resources, and preparation of research reports.

ELECTIVES

CCJ 3271 Criminal Procedure (5)
An in-depth study of the 4th through 8th Amendments of the Constitution, and their impact on the criminal justice process.

CCJ 3291 Judicial Administration-Criminal (5)
Study of the rules of criminal procedure and evidence affecting the responsibilities of court administrators. Administrative relationships of courts with agencies involved in the criminal justice system will be examined.

CCJ 3320 Community Based Treatment (5)
An examination of the various pre-trial and post-trial community based treatment programs. A special emphasis will be placed on the impact these programs have upon the criminal justice system and the clients they serve.

(Continued)

Criminal Justice

CCJ 3340 Correctional Counseling (5)
A course designed to explore the nature and function of counseling within the correctional setting.

CCJ 3341 Correctional Treatment (5)
A concentrated study of the various institution-based treatment programs. Emphasis is on the impact and operational aspects of these programs.

CCJ 3450 Institutional Organization and Administration (5)
Analysis of internal organizational structure and executive roles and functions in criminal justice agencies. Examines administrative and managerial concepts underlying decision making, policy formulation, operational strategies, and coordination and control procedures. Cases and outside research reports are used for specific analysis.

CCJ 3460 Management of Human Resources (5)
Analysis of criminal justice manpower input problems—recruitment, selection, placement, training, development and control at all levels. Emphasis is on policy issues, research findings, and advanced techniques.

CCJ 3461 Developing Interpersonal Communication (5)
The emphasis of this course is on the development of interpersonal communication practices that can be effectively utilized in a helping role and on the job, to improve interaction among employees and between the employees and the public.

CCJ 3470 Criminal Justice Planning (5)
Planning methods applicable to criminal justice agencies are examined. Emphasis is on planning as a decision making process for criminal justice agencies. Theories, techniques, and applications studied.

CCJ 3530 Delinquency Prevention and Control (5)
Social dimensions of juvenile delinquency, its nature, scope and distribution. Comparison and analysis of agencies of control and prevention.

CCJ 3934 Contemporary Issues in Criminal Justice (5)
An extensive examination of selected contemporary issues in criminal justice. May be repeated.

CCJ 3949 Cooperative Education in Criminal Justice (5)
Supervised full time work quarter for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op program with consent of advisor. Prerequisite: third quarter academic standing.

CCJ 4130 Police-Community Relations (5)
A study of the concept of police-community relations, emphasizing the police role in community tension and conflict.

CCJ 4250 Criminal Justice and the Constitution (5)
A study of constitutional issues as they relate to the administration of criminal justice.

CCJ 4280 Law and Criminal Justice (5)
The resolution of criminal justice problems through the application of the law. The nature, sanctions, and limits of law. Categories of law and schools of jurisprudence.

CCJ 4281 Legal Aspects of Corrections (5)
This course addresses the investigation of legal problems of prisoners, from conviction to release. Emphasis will be placed on the legal problems involved in presentence investigations, sentencing, probation, parole, incarceration, and loss and restoration of civil liberties.

CCJ 4330 Probation and Parole (5)
An examination of the treatment of convicted law violators by the correctional field services, before and after prison.

CCJ 4400 Methods of Institutional Change (5)
Analysis of evolutionary and revolutionary changes in political institutions and agencies. Means, methods and techniques for initiating and implementing meaningful change within the criminal justice system.

CCJ 4440 Administration of Correctional Institutions (5)
Theories and techniques of administering correctional institutions, treatment, security, and custody. Social structure of the prison community and inmate social systems. Case studies.

CCJ 4462 Human Relations Training (5)
An experience based course that will prepare selected students to present human relations training programs in criminal justice agencies.

CCJ 4630 Comparative Criminal Justice Systems (5)
A critical comparative study of various American criminal justice subsystems with those of selected industrialized foreign countries, including discussion of administration, organization, objectives, principal functions, and levels of control.

CCJ 4661 Terrorism and Violence in Criminal Justice (5)
An analysis of terrorism and violence in criminal justice. Law and other control mechanisms will be examined.

CCJ 4662 Criminal Justice and the Minority Community (5)
A general survey of the institutions of justice in the United States, and their contacts with minority people. The focal point of this course will be the role of racial/ethnic minorities in the criminal justice system.

CCJ 4663 Women, Crime and the Criminal Justice System (5)
Women as deviants, criminals, victims and professionals in the criminal justice system.

CCJ 4900 Directed Readings in Criminal Justice (2)
Extensive reading and analysis of selected literature under faculty supervision. Permission of instructor and Program Chairperson required. Two credits per quarter with a 5 credit maximum.

CCJ 4910 Independent Research (1–5)
A course designed to provide qualified students with the opportunity to perform meaningful research in areas of criminal justice under the direction of a faculty member. Permission of the instructor required. (10 credit maximum)

CCJ 4940 Field Work and Special Projects (1–15)
A course designed to broaden the experiential base, application of theoretical content to criminal justice. Advisor's approval required. (Credit. No credit grading)

CCJ 4949 Cooperative Education in Criminal Justice (5)
Supervised full time work quarter for criminal justice academic majors who demonstrate their interest in and potential for developing practical field agencies experience. Limited to students admitted to Co-op Program with consent of advisor. Prerequisite: Senior academic standing.

Criminal Justice Graduate Program

The Master of Science degree program in Criminal Justice is a professional program designed to prepare students for management responsibilities in the criminal justice sector or public sector related activities.

The objectives of the master's program are:

1. To provide present and future criminal justice managers with the skills needed to function effectively in our ever-changing society.

2. To serve as a catalyst for interdisciplinary research and study of criminal justice and related problems.

3. To provide the criminal justice system with qualified students for academic careers in

(Continued)

Criminal Justice

administration, planning and analysis, and teaching in colleges and universities.

The minimum academic requirement for admission to the criminal justice master's program is graduation from an accredited baccalaureate program. Although it is helpful, students need not have had any formal coursework in criminal justice. Competent students from any major field of study are eligible for admission. After initial counseling, a determination will be made regarding any need for remedial course work.

Students having a bachelor's degree from an accredited institution and a "B" average or above for the last two years of undergraduate work, and a total score of 1000 on the Graduate Record Examination are eligible for unconditional admission to the program. Provisions can be made for admittance as Special Students until admissions criteria have been satisfied. Under certain circumstances, exceptions to these standards can be made.

LOCATION: Tamiami and North Miami Campuses.

DEGREE: *Master of Science in Criminal Justice*

A. *Degree Credit Requirements*

The master's degree in criminal justice requires sixty (60) quarter hours of credit. A maximum of ten (10) quarter hours may be transferred into the program from other accredited institutions, subject to the approval of the Graduate Admissions Committee. Candidates have the option of two programs of study, i.e., the thesis and non-thesis options. Those selecting the thesis option are required to complete 50 quarter hours of course work and 10 quarter hours of thesis. The non-thesis option consists of 60 quarter hours of course work and comprehensive written and oral examinations. All candidates must take five core seminars.

B. *Specific Program Requirements Are:*

All course work taken in residence must be taken in the Criminal Justice Graduate Program, except that with the permission of the Graduate Admissions Committee, a total of not more than ten (10) quarter hours may be taken in any other relevant graduate program in this University.

		Quarter Hours
Core Courses:		**25**
CCJ 6055	Seminar in Criminal Justice	5
CCJ 6476	Criminal Justice Planning	5
CCJ 6477	Information Systems for Criminal Justice	5
CCJ 6706	Applied Statistical Techniques for Criminal Justice	5
CCJ 6709	Advanced Research Methods	5
CCJ 6971	Thesis Research	5
CCJ 6976	Masters Thesis	5
Administrative Concentration:		**15 or 20**
CCJ 6456	Administration and Management of Criminal Justice Agencies	
CCJ 6457	Organizational Development in Criminal Justice Agencies	
CCJ 6467	Human Resources Management in Criminal Justice	
CCJ 6485	Politics and Criminal Justice	
CCJ 6486	Labor Relations in the Criminal Justice Sector	
CCJ 6716	Productivity and Program Evaluation	
General Electives:		**10 or 20**
CCJ 5056	History and Philosophy of Criminal Justice	
CCJ 5057	Ethics of Criminal Justice	
CCJ 6050	Seminar in Criminology	
CCJ 6105	Seminar in Law Enforcement	
CCJ 6285	Seminar in the Concept of Justice	
CCJ 6365	Seminar in Corrections	
CCJ 6468	Intergroup Relations in Criminal Justice	
CCJ 6495	Seminar in Court Administration	
CCJ 6525	Seminar in Juvenile Justice	
CCJ 6635	Seminar in Comparative Criminal Justice	
CCJ 6665	Seminar in Victimology	
CCJ 6717	Social Implications of Human Evaluation by Criminal Justice Agencies	
CCJ 6945	Field Experience in Criminal Justice	
		Total 60

Additional Procedures:

All students will select a committee of three graduate faculty members, the student's major faculty advisor being a member and Chairperson of this committee. The major advisor and committee will be responsible for overseeing the student's work while in the master's program. Admission to the program should not be construed as admission to candidacy for a degree. Students may apply for candidacy upon completion of 25 quarter hours (including 2 of the 5 core courses). Admission to candidacy should be completed before the student enrolls for the last 20 hours.

C. *Graduation Requirements:*

To receive the master's degree in Criminal Justice, a student must satisfy all University regulations governing graduate study. Students in the thesis track must be admitted to candidacy and complete the 5 core courses, 3 administrative electives, 2 general electives, and the thesis. The student may be required to undergo an oral discussion of the thesis. Students in the non-thesis track must be admitted to candidacy and complete the 5 core courses, 4 administrative electives, 3 general electives, and a written and oral comprehensive examination.

Master of Science in Criminal Justice

Definition of Prefixes
CCJ–Criminology and Criminal Justice

Core Courses

CCJ 6055 Seminar in the Criminal Justice Systems (5)
Advanced study of problems, trends and critical issues involved in the administration of criminal law as a means of social control. Emphasis is on systematic relationships and systems theory building.

CCJ 6476 Comprehensive Criminal Justice Planning (5)
The planning environment of criminal justice is examined. Emphasis is on the role and methods of managing and organizing the planning pro-

(Continued)

Criminal Justice

cess applicable to systematizing criminal justice. Case studies are developed.

CCJ 6477 Information Systems for Criminal Justice (5)
An advanced seminar in the survey and application of electronic data of use to the criminal justice sector. Prerequisite: COC 3300 or permission of Instructor.

CCJ 6706 Applied Statistical Techniques for Criminal Justice (5)
Statistical tools applicable to criminal justice research are examined. Emphasis is on developing an understanding of the various techniques and their applications. The use of computerized statistical packages will be presented. Prerequisites: STA 3122 and STA 3123 or permission of Instructor.

CCJ 6709 Advanced Research Methods (5)
The focus of this course is on the presentation and discussion of research methodology of primary interest to criminal justice students. Emphasis is placed on preparation for thesis research, the requirements for proposal preparation and final thesis report.

CCJ 6971 Thesis Research (5)

CCJ 6976 Masters Thesis (5)

ELECTIVES

CCJ 5056 History and Philosophy of Criminal Justice (5)
The historical and philosophical background of criminal justice is presented as a foundation for analysis and theory. The historical presence of peacekeeping and order-maintenance in all groups is researched. The nature and impact of philosophical comment on criminal justice is evaluated. No prerequisites.

CCJ 5057 Ethics of Criminal Justice (5)
An examination of the principles supporting various formal statements of appropriate standards of conduct for professionals in criminal justice. Each of the major subdivisions of criminal justice is examined as to ethical and moral judgments, past and present. Prerequisites: Admission to the Graduate Program of Criminal Justice or, for undergraduate students, permission of the instructor.

CCJ 6050 Seminar in Criminology (5)
A critical study of selected theoretical and research issues related to the nature and causes of crime. Special topics are announced at the beginning of each quarter. May be repeated.

CCJ 6105 Seminar in Law Enforcement (5)
An analysis of current major hypotheses and problems in law enforcement. Special topics announced at the beginning of each quarter. May be repeated.

CCJ 6285 The Concept of Justice (5)
A study of philosophical and utilitarian approaches to the definition of justice, and the varied translations of the concepts of justice into concrete action.

CCJ 6365 Seminar in Corrections (5)
An analysis of current major hypothesis and problems in corrections. Special topics announced at the beginning of each quarter. May be repeated.

CCJ 6456 Administration & Management of Criminal Justice Agencies (5)
An examination of the criminal justice system from the perspective of administrative and management problems. Emphasis is on the identification of solution alternatives for those problems having the most significant impact on the components of the criminal justice system.

CCJ 6457 Organizational Development in Criminal Justice Agencies (5)
A course designed to familiarize students with the organizational development methodologies that have relevance to the management of change within criminal justice agencies. Special attention will be given to case studies of the various methodologies utilized by criminal justice agencies.

CCJ 6467 Human Resources Management in Criminal Justice (5)
A study of the various employment practices within criminal justice agencies and the impact of these practices on the development of the criminal justice system.

CCJ 6468 Intergroup Relations in Criminal Justice (5)
A study of theories, strategies and tactics employed in intergroup relations in criminal justice. Attention is given to increasing the student's awareness and sensitivity to the dynamic forces within intergroup relations, as a means of increasing his or her productivity as a criminal justice practitioner.

CCJ 6485 Politics and Criminal Justice (5)
An analysis of the various criminal justice subsystems as they interrelate with the political system, political feasibility, community control, and social and economic policy.

CCJ 6486 Labor Relations in the Criminal Justice Sector (5)
An examination of the area of collective bargaining for public employees. Special emphasis is placed on the current status of labor relations law and its impact on the criminal justice system.

CCJ 6495 Seminar in Judicial Administration (5)
An analysis of current major hypotheses and problems in judicial administration. Special topics announced at the beginning of each quarter. May be repeated.

CCJ 6525 Seminar in Juvenile Justice (5)
Philosophy and procedures of the juvenile courts. Discussion of dependency, delinquency, and family law. Evaluation of juvenile court practices.

CCJ 6635 Seminar in Comparative Criminal Justice Systems (5)
A comparative study of the various criminal justice systems in the United States with similar governmental and social systems in other countries.

CCJ 6665 Seminar in Victimology (5)
An in-depth study of the criminal victim relationship.

CCJ 6716 Productivity and Program Evaluation (5)
A systematic review of the problems involved in productivity, improvement in criminal justice agencies, and program evaluation.

CCJ 6717 Social Implications of Human Evaluation by Criminal Justice Agencies (5)
An advanced study of the social implications of human evaluation by criminal justice. This study deals with the impact made on society by agency policies and procedures. There is a heavy research component in this course.

CCJ 6945 Field Experience in Criminal Justice (5)
A course designed to provide selected students an opportunity to engage in action-oriented research within a criminal justice agency on a designated research project.

CCJ 6971 Thesis Research (5)
This course is devoted to the actual research labor required for a thesis in the Masters program.

CCJ 6976 Masters Thesis (5)
This course is devoted to the effort required to prepare the thesis document.

Health Services Administration

Health Services Administration

Thomas M. Dunaye, *Professor and Chairman*
Sanford Kravitz, *Distinguished Professor*
Vandon E. White, *Professor*
Herbert J. Lerner, *Professor*
Nicholas D. Richie, *Associate Professor*
Maria Belen Ortiz–Morales, *Associate Professor*
Alan M. Gilbert, *Assistant Professor*
Denis H. J. Caro, *Assistant Professor*

Masters and Bachelors Programs

The Department of Health Services Administration offers graduate and undergraduate studies leading to Masters and Bachelors degrees in Health Services Administration.

The graduate program provides scholarly, scientific and professional education which is characteristic of traditional preparation for management executives practicing the administration of complex health care organizations in governmental and private settings geographically within communities, regional, state and national systems.

The upper-division baccalaureate program provides professional education which typifies the traditional preparation of mid-level administrators and department supervisors practicing various middle-management functions usually in community-based health care settings.

The modern management of health services occurs in an environment vexed with problems of organizational and technological change. Administrators charged with executive responsibilities must be grounded in a high degree of formal professional training followed by lifelong learning which fosters their continuous professional growth. With the delivery of health services becoming vastly more complex, general management competencies have emerged three and four levels below that of the chief executive officer in large health institutions. Many of the same skills needed for executive management are now also required to provide administrative leadership in staffing, directing, coordinating and controlling the operational resources of administrative and clinical units in such organizations.

The masters program in health care management, by virtue of its academic and field experience requirements, is generally considered a terminal professional degree program because most graduates will seek immediate employment in a career application of these studies at the central or overall level of administration.

The bachelors program is designed to qualify students for entry-level administrative positions with various health care organizations or may, depending upon a student's prior professional experience in this field, serve as the necessary ideal preparation for further graduate study in health care management such as the masters program offered by this Department. Both programs are structured systematically on the model of bachelors studies scholastically-linked directly to the masters studies in a logical sequence of "basic-to-advanced" education for this profession. Such opportunity for bi-level academic preparation in an integrated programmatic framework at the same university is an unusual innovation in academic settings at the present time in the United States.

Doctoral studies (e.g., Dr.P.H. and Ph.D. programs) in health services administration are available at various universities for graduate students to acquire highly advanced qualifications in this field, mainly for teaching and research applications. This level of study is not currently offered at Florida International University, but the Department is planning for the development of this opportunity in the future. Similar planning is underway for collateral joint masters degrees (e.g., M.B.A. with Business Administration and M.P.A. with Public Administration) growing out of the Department's interdisciplinary relationships with other academic units at Florida International University and related institutions in the area.

While the programs are designed *primarily* for *fulltime students* who usually graduate within a two-year period, the same curricula may be completed by a *limited* number of *part-time* students within three years. Formal studies stress a basic foundation of professional knowledge, skills and competencies in management, planning, analytic and policy functions of health services. Although this focus is essentially concerned with application in the United States, the Department expects to expand its consideration of health care systems on the international level in all programmatic aspects.

Because these studies provide a professional emphasis, the Department utilizes a variety of local hospitals, longterm care facilities, prepayment plans, mental health programs, multi-institution corporations, emergency medical systems, health maintenance organizations, and related public health and private agencies to give students supervised field experiences and a "practical laboratory" for operational research in health services administration.

The goal of both masters and bachelors programs is to create an academic center in which the university can respond to the educational needs of the field of health services administration. The Department's mission, therefore, is dedicated to the following educational *objectives:*

1. To provide professional studies in the theories, methods and practices of health care management, planning, analysis, applied research and policy development in health services organizations.
2. To offer continuing education opportunities periodically for practicing administrators toward improving the effectiveness of their management performance.
3. To participate in interprofessional education experiences with faculty, students, and practitioners of the allied health sciences, public affairs and related human service professions interacting with the field of health care management.
4. To extend consultation and technical assistance to appropriate organizational settings and practitioners in health services and administrative practice.
5. To conduct scholarly and applied research on various management problems and issues of significance to improving the delivery of health services.
6. To review and revise program curricula and objectives from time to time in order to keep current with the changing educational and professional needs of the field.

The Department is an Associate Member of the Association of University Programs in Health Administration and eligible for national accreditation by the Accrediting Commission on Education for Health Services Administration.

Bachelor of Health Services Administration

Admissions Criteria

Students seeking admission into the bachelors program must meet the following minimum requirements:

A. An Associate of Arts degree, or its equivalent (e.g., Associate of Science) in lower-division coursework (90 quarter hours or 60 semester hours) completed in the first two years of preparation at an accredited college or university, with a minimum 2.0 cumulative grade point average.

(Continued)

Health Services Administration

B. All Florida International University general education requirements, including 9 quarter hours of English, 9 quarter hours of humanities, 9 quarter hours of natural science, 4 quarter hours of mathematics, 9 quarter hours of social science and 14 quarter hours of the general education electives, among the minimum 90 quarter hours (or 60 semester hours) needed for admission to upper-division coursework.
C. Any other general admissions requirements of undergraduate programs at Florida International University as found in the catalog of the current academic year.

Additional Program Standards for Admission

1. Three-year diploma school of nursing graduates are to be referred to the Department for evaluation.
2. Non-traditional coursework is to be referred to the Department for evaluation.
3. The maximum of lower-division transfer credits will be 90 quarter hours. Upper-division quarter hours may be transferred up to a maximum of 45 credits toward the fulfillment of elective requirements or equivalent required courses in the program.
4. Admitted applicants must meet *all* general education requirements of Florida International University, or receive provisional admission only if:
   a) The applicant is currently enrolled in lower-division courses which will remove all general education deficiencies in his or her record, or
   b) The applicant is currently enrolled as an FIU special student to remove all general education deficiencies in his or her record.

Admissions Procedure

The applicant for admission to the bachelors program in health services administration must follow the same application procedures for admission to Florida International University.

Minimum Recommended Course Loads

Full-time students must enroll in 10–14 quarter hours and part-time students may enroll in less than 10 quarter hours.

Approval for exceptions must be obtained from the Department Chairman who may request recommendations from the Department Academic Policy Committee.

Special Student Registration

Only fully-admitted regular students, full or part-time, may register for Department courses. Special students, who have been counseled by an appropriate Department faculty advisor, must observe the regulations pertaining to special student non-degree-seeking status and enroll only in 3000-level courses unless special permission is obtained from the Department.

Time Limit

All work applicable to the bachelor program in health services administration must be successfully *completed within 21 months* (including a full-time administrative internship placement within this period) from initial admission as a full-time student, or 3 years as a part-time student, to be awarded the bachelor's degree by the School of Public Affairs and Services at Florida International University. In unusual circumstances, students may petition the Department Chairman to be granted an extension if reasons are warranted.

Academic Probation and Dismissal

Probation: A student whose grade point average (GPA) in any Quarter falls below a 2.0 will automatically be placed on probation, indicating serious academic difficulty. The Department, through University channels, will appropriately communicate the necessary conditions to be met for continuing to remain enrolled in the program.

Dismissal: A student on probation who fails to earn a 2.0 during that quarter will automatically be dismissed from further enrollment. A student who has been academically dismissed may apply for readmission no earlier than one year after the quarter of dismissal.

Internship Requirement

Full-time students are expected to begin a full-time administrative internship for completion of the bachelor degree in the Spring Quarter of the second year. If this period of field placement is evaluated by the Department as successful, the student will graduate at the end of the Spring Quarter in the second year (usually 21 months in total).

Full-time or equivalent part-time administrative internships are also required for part-time students, when they have satisified all other curriculum requirements that serve as pre-requisites for field work. The internship and all other course work for part-time students must typically be completed within three years of initial admission to the program.

All students must achieve a G.P.A. of 2.5 or better in all upper division coursework before they are permitted to enroll in the Administrative Internship (HCA 4940).

The Department utilizes the administrative internship as its mechanism for permitting students to earn income occasionally while studying in the program, in lieu of special arrangements with the University's Office of Cooperative Education.

For further information regarding internship placements, reference should be made to the Department Policy and Procedures Statement on the Administrative Internship.

Credit for Life/Work Experiences

In accordance with University policy, the Department has established its prerogative of *not* awarding credit for life/work experience in substitution for normal coursework in its graduate and undergraduate programs.

Departmental Relationship with the External Degree Program

All students admitted to the External Degree Program seeking the bachelor's degree in health services administration must be admitted to the University *and* the Department according to the same admissions policies established for regular full-time and part-time students, and must enroll in all required courses (66 credit hours of didactic courses) in the program at FIU's major campuses. The balance of the ten-hour required Administrative Internship course and 14 credit hour elective requirements may be arranged in other University settings if taken outside of FIU's immediate geographic service area through the External Degree Program, or through independent study mechanisms, accepted with prior approval by the Department.

General Requirements

All Department students completing the B.S. in Health Services Administration are also subject to undergraduate student regulations and degree requirements governed by the policies of the School of Public Affairs and Services and

(Continued)

Health Services Administration

Florida International University.
LOCATION: North Miami Campus Only
DEGREE: *Bachelor of Health Services Administration*

Major Required Courses:		*Quarter Hours*
		76
HCA 3120	Health and Social Service Delivery Systems	5
HCA 3501	Management for the Health Professions	5
GEY 3002	Medical Terminology	2
HCA 4123	Team Approach to Health Services Delivery	2
HCA 4125	Issues and Trends in Health Care Delivery	5
HCA 4203	Health Care Financial and Accounting Management	5
HCA 4303	Health Care Organization and Administration	5
HCA 4313	Legal Aspects and Legislation in Health Care	5
HCA 4430	Principles and Programs in Public Health	5
HCA 4432	Principles of Applied Epidemiology	5
HCA 4511	Human Resources Management and Supervision	5
HCA 4520	Automated Management and Information Systems	5
HCA 4710	Health Management Systems Engineering	5
HCA 4711	Statistical Methods for Health Care	5
HCA 4714	Fundamentals of Health Research Methods	2
HCA 4940	Administrative Internship	10

Elective Courses		*Quarter Hours*
		14
GEY 3002	Issues and Trends in Gerontology	2
HCA 3103	Mental Health and Mental Retardation	2
HCA 4115	People, Power and Politics in Health Affairs	2
HCA 4127	Family, Health Centers	2
HCA 4506	Applied Management in Health Care Organization	2
HCA 4612	Program Planning and Evaluation	2
HCA 4521	Health Care Computer Applications	2
HCA 4905	Independent Study	2
HCA 4930	Special Topics Seminar in Health Services	2
		90

Bachelor of Health Service Administration

Course Descriptions

Definition of Prefixes
HCA-Health Care Administration
Required Courses:

HCA 3120 Health and Social Service Delivery Systems (5)(F,W,S,SS)
In this course students examine the history and current functions of health and social service delivery systems in the United States. The focus is on the components of these human service systems, how they interact, and their internal and external controls. Since this is the basic foundation course in the bachelor's curriculum for health services administration, the content is largely didactic in presentation.

HCA 3501 Management for the Health Professions (5)(F,W,S,SS)
This course surveys the fundamental theories, principles and concepts of management to prepare the student for a middle-management position in health care. A primary objective is to begin developing the ability to effectively solve problems utilizing management tools and techniques. Practical applications of management theory in health care organizations are approached largely through the use of case studies.

MRE 3001 Medical Terminology (2)(F,W,S,SS)
Provides the student with basic medical language skills, including pronunciation, spelling, and definitions necessary for communication in the medical world.

HCA 4123 Team Approach to Health Services Delivery (2)(F)
The purpose of this course is to identify factors involved in team formation, structure, composition, maturity, growth, and process. The fundamental processes of role definition and negotiation, communication, conflict-resolution, and decision-making, as they relate to team effectiveness, are presented to analyze team functioning. Factors such as individuality, personal values, and leadership styles are discussed. Much of the course is developed experimentally using role-play, simulation gaming, and group projects as the predominant instructional modality.

HCA 4125 Issues and Trends in Health Care Delivery (5)(W)
This course presents the student with various significant health care issues and their developing trends. To keep timely with changing events of varying importance, the course content may be somewhat different each time it is offered. Depending on the currentness and relevance of these developments, however, the basic focus will generally cover policy questions involving health care organization, financing, quality, controls, and delivery of services.

HCA 4203 Health Care Financial and Accounting Management (5)(F)
This course is designed to help the future health service department-level administrators understand financial management as one of their primary responsibilities. Basic accounting principles are addressed with emphasis placed on the use of accounting information to make managerial decisions. Topics include third party payers, volume forecasting, budgeting procedures, and rate setting techniques.

HCA 4303 Health Care Organization and Administration (5)(W)
This course examines health care organization in the United States from a systems viewpoint, with a focus on 1) the extent to which the nation is presently developing a unified "macro" health care system, 2) a variety of "microsystem" settings in health care delivery, and 3) the growing phenomenon of corporate hospital management. The administrative implications of a systems approach are explored with opportunity for students to prepare schematic models of various sectors of the health care system toward the objective of improving the existing patterns.

HCA 4313 Legal Aspects and Legislation in Health Care (5)(F)
This course involves the study of the corporate structure and legal liabilities of different types of health care institutions. The responsibilities and duties of health professionals and what action constitutes a breach of that duty are presented. Intentional and unintentional tort law is examined, including the health professional's grounds for defense in malpractice suits. Federal, state, and local statutes for the provision and regulation of health services and facilities form the legal framework for analysis.

HCA 4430 Principles and Programs in Public Health (5)(S)
This course presents analysis of public health programs and their planning, with an overview of the organization of public health practices at

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various levels. Public health history and philosophy form the background of discussion which focuses on broad environmental and epidemiological problems occurring in urban and rural communities throughout the U.S.

HCA 4432 Principles of Applied Epidemiology (5)(SS)
The student is introduced to a broad survey of the methods and techniques used by epidemiologists investigating the distribution and causes of infectious and noninfectious diseases. A holistic approach is taken to the application of epidemiology principles in disease surveillance and control at the community level through public health agencies.

HCA 4511 Human Resources Management and Supervision (5)(SS)
The role of health personnel supervisors is examined in relation to directing the work responsibilities of health care employees. Interviewing, performance appraisal, disciplining, counseling, job orientation, in-service training, and other personnel functions are explored. The literature on employee motivation and productivity is reviewed with implications for improved management practices. Legislation affecting personnel in hospitals and other health care organizations is reviewed for understanding the basic structure of labor relations developing in the health field.

HCA 4520 Automated Management and Information Systems (5)(S)
This course is concerned with the analysis, design, and installation of management information systems in health care organizations. Cost-benefit aspects of information, evaluation of computer systems, file design and data management, data capture, storage and retrieval, and various economic considerations in systems acquisition are among the topics addressed. Emphasis is placed on understanding the unique characteristics of management information techniques systematically applied in the health care industry.

HCA 4710 Health Management Systems Engineering (5)(W)
This course provides administrative health personnel with an introduction to health systems analysis and applications of various industrial engineering methods and procedures. Work systems, job analysis, space utilization, inventory control, and traffic patterns are among the program engineering topics explored.

HCA 4711/STA 4161 Statistical Methods for Health Care (5)(W)
A course in descriptive and inferential statistics for the health services. Topics include probability distributions, point and interval estimation, hypothesis testing, regression and correlation and contingency table analysis. Prerequisite: STA 3013 or equivalent college mathematics course.

HCA 4714 Fundamentals of Health Research Methods (2)(F)
In this course the student is introduced to the formal study of research methods, including literature search, hypothesis generation and testing, sampling theory, research design, data analysis, and formal report writing. Since this is a basic introductory course, it will consist largely of didactic content. Prerequisite(s): HCA 4711.

HCA 4940 Administrative Internship (10)(F, W, S, SS)
The student who has completed all required and elective upper division course work is provided an opportunity to observe and engage in administrative practice in a health care setting in order to enhance all prerequisite classroom instruction in the program. Upon successful completion of this course the student will be able (among others) to: 1) recognize and identify the administrative methods used in the organizational placement setting, 2) perform selected administrative procedures, 3) identify administrative, governance, funding and service structures, and 4) relate academic management theory to the organization's actual functioning. The student's experience will be evaluated by Department faculty through a combination of institutional visits and conferences with the agency preceptor and the student, evaluation of a weekly log kept by the student, and evaluation of final reports submitted by both student and preceptor. Prerequisite(s): Completion of all curriculum required course work.

ELECTIVE COURSES

GEY 3002 Issues and Trends in Gerontology (2)(F)
This course introduces students to a study of the aging phenomenon and social attitudes towards the elderly. Reviewed are various program efforts being undertaken by public and private agencies to cope with the problems of the aged.

HCA 3103 Mental Health and Mental Retardation (2)(F)(S)
In this course the student explores the history of care for the mentally ill and retarded in the United States Relevant legislation, issues and trends at federal, state and local levels are examined, including the role of parent and family groups in the professional treatment of this important health client group. Program planning for mental health services is given major emphasis.

HCA 4115 People, Power and Politics in Health Affairs (2)(W)
In this course a demographic analysis of the United States population is examined in terms of the health needs of various special groups. Community power structures are analyzed to determine how they function in policies and decisions that govern the distribution of goods and services in society. Values, morals and expectations of various cultural and political groups are analyzed in relation to their impact on health care delivery systems. The role of organized health professionals is also studied to determine their influence in the political process of community control of health services.

HCA 4127 Family Health Centers (2)(F)(W)
This course presents an historical review of family health centers and considers the role of primary care as an expanding alternative in meeting community health needs.

HCA 4506 Applied Management in Health Care Organization (2)(S)(SS)
In this course management theory and principles are examined in their application to the administrative process linking executive level administration with management functions at the unit or department level in complex health care organizations. The student explores in-depth how formal structure, organizational policies, interprofessional practices, and program resources are combined in making and implementing departmental decisions which support the objectives of the organization as a whole. Case studies are emphasized as a source of actual problems and situations illustrating operational conditions found in health care settings.

HCA 4612 Program Planning and Evaluation (2)(S)
Students are introduced to basic concepts of planning and evaluation as the fundamental tools of program design and development. Opportunities for both theoretical and practical applications in the use of basic techniques are developed through both classroom exercises and student projects arranged under operational conditions in health care agencies.

HCA 4521 Health Care Computer Applications (2)(SS)
Students in this course experience the use of computer applications for administrative analysis of various patient care, financial and program data typically found in health care situations. The hospital organization model is used as a framework for discussing the design, interface characteristics, and data structures which can be technologically facilitated through the use of appropriate computer services. Basic hardware and soft-ware requirements of high-

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volume data processing situations are examined in hospital operations. Prerequisite(s): HCA 4502.

HCA 4905 Independent Study (2)(F,W,S,SS) This course is designed to allow students an opportunity for in-depth research or an action-oriented project carried out under the supervision of their faculty advisor. As an elective, an independent study should only be taken after substantial course work has already been completed in the program curriculum. In all cases preparation and approval for this course should be arranged during the academic quarter preceding the quarter planned for the study to begin. Prerequisite(s): Permission of faculty advisor and course coordinator.

HCA 4930 Special Topics Seminar in Health Services (2)(F,W,S,SS) This course is arranged to allow students to investigate one or more special topics of interest in the health care field and will usually be taught by visiting faculty or a planned group of guest lecturers who are qualified to bring particular expertise and experience to the topic(s) selected. The objectives aim toward expanding student knowledge in specialized fields when particular circumstances can be arranged for the required faculty resources and sufficient course enrollment. In all cases preparation and approval for this course should be arranged during the academic quarter preceding the quarter planned for the study to begin. Prerequisite(s): Permission of faculty advisor and course coordinator.

Master of Health Services Administration

Admission Criteria

Students seeking admission into the graduate program must meet the following minimum requirements:

A Bachelor's degree or equivalent from a regionally accredited university or college.

A "B" or better average in all work attempted while registered as an upper-division student for a baccalaureate degree, or a total score of 1000 on the Graduate Record Examination (GRE), but *preference will be given to those who meet both of these qualifications.*

All graduate applicants to this program are required to take the GRE regardless of previous grade-point average. All applicants must achieve a minimum GRE score of 850 (425 or better on both verbal and quantitative sections).

Prerequisites for admission to this program are upper-division course work in basic accounting and statistics with grade equivalents of "C" or better. (HCA 4203 and HCA 4711 are examples of recommended courses provided by the Department).

Meeting the minimum requirements does not guarantee admission to the program. Admission will be based on space availability, relevant work experience, scholastic achievements, and compatibility of applicant's career goals with the program's objectives.

Admissions Procedures

A student planning to enroll in the graduate program in Health Services Administration must complete the following steps and meet the stipulated requirements:

a. Submit a graduate application for admission to the Admissions Office of Florida International University, from which these forms will be mailed upon request. The admission process may require as much as two months after receipt of the application, depending upon the time involved in the receipt of transcripts and test scores. Together with the application form, the candidate is requested to submit a written statement of his/her career goals in relation to the desire to seek higher education in the field of Health Services Administration. This information should not exceed 500 words in length.

b. Have all official transcripts of previously-earned college or university credits sent from the applicant's former institution(s) to the Admissions Office of Florida International University (copies submitted directly by applicants are *not* acceptable for application purposes).

c. Submit his/her scores on the Graduate Record Examination (GRE) administered nationally by the Educational Testing Service, Box 955 (GRE), Princeton, New Jersey 08540.

Foreign students must submit their scores on TOEFL or a comparable examination, and meet all University admissions standards and procedures for international student admissions (see the appropriate section of the University Catalog).

All admitted students, whether full-time or part-time, will begin their program of study in the Fall Quarter, and all completed applications must be received by the Department no later than *March 15* preceding Fall Quarter admission.

The Department Admissions Committee will review completed applications and candidates will be notified if they are selected for a personal intereview, which will be arranged at the mutual convenience of applicants and University faculty (or their delegates).

Degree Requirements

To be eligible for a Master's degree, a student must:

1. Satisfy all University requirements for the Master of Health Services Administration Program.
2. Complete a minimum of 90 quarter hours of graduate-level coursework which includes the Master's Research Project, in addition to the administrative residency (which course credits are counted in the total 90 credits required).
3. Earn a minimum G.P.A. of 3.0 or equivalent in all work completed at FIU as a graduate student.
4. No courses in which a grade below "C" is earned may be counted toward the master's degree, however, all work taken as a graduate student will be counted in computing the G.P.A., including courses graded "D" or "F," and any undergraduate courses taken as a graduate student.
5. A maximum of 8 quarter hour-credits of graduate coursework may be transferred from an accredited university by petition at the time of admission, if approved by the Department Admissions Committee according to the policies on academic standards.

Minimum Recommended Course Loads

Full-time students must enroll in 15 quarter hours and part-time students should enroll in 7–8 quarter hours.

Approval for exceptions must be obtained from the Department Chairman who may request recommendations from the Department Academic Policy Committee.

Special Student Registration

Only fully-admitted regular students, full-time or part-time, may register for Department courses. Special students, who have been counseled by an appropriate Department faculty advisor, must observe the regulations pertaining to non-degree-seeking status and enroll only in 5000-level courses unless special permission is obtained from the Department.

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Time Limit

All work applicable to the master's program in health services administration must be successfully *completed within 21 months* (including a full-time residency placement within this period) from initial admission as a full-time student, or 3 years as a part-time student, to be awarded the master's degree at Florida International University. In unusual circumstances, students may petition the Department Chairman to be granted an extension if reasons are warranted.

Academic Probation and Dismissal

Probation: A student whose grade point average (GPA) in any quarter falls below a 3.0 will automatically be placed on probation, indicating serious academic difficulty. The Department, through University channels, will appropriately communicate the necessary conditions to be met for continuing to remain enrolled in the program.

Dismissal: A student on probation who fails to earn a 3.0 GPA during that quarter will automatically be dismissed from further enrollment. A student who has been academically dismissed may apply for readmission no earlier than one year after the quarter of dismissal.

Residency Requirement

Full-time students are expected to begin a full-time administrative residency for completion of the master's degree in the Winter Quarter of the second year, and continue through the Spring Quarter. If this period of field placement is evaluated by the Department as successful, the student will graduate at the end of the Spring Quarter in the second year (usually 21 months in total).

The responsibility for locating and arranging this approved field placement predominantly falls upon the student with assistance by the Department through the student's faculty advisor who will recommend approval of the student's residency arrangements. During this period, the residency will also constitute full-time matriculation in the program and require payment of regular tuition fees for the field placement courses in the Winter and Spring Quarters, 10 credits each term. These 20 credits count toward the completion of the 90 credit-hours required for the master's degree. Administrative residencies will be evaluated by departmental faculty and preceptors in a manner similar to regular course work.

Full-time or equivalent part-time administrative residencies are also required for part-time students, when they have satisfied all other curriculum requirements that serve as pre-requisites for field work. The residency and all other course work for part-time students must typically be completed within three years of initial admission to the program.

For further information regarding the residency requirements, reference should be made to the Department Policy and Procedures Statement on the Administrative Residency.

Master's Research Project Requirement

The master's research project is normally initiated and completed during the Fall Quarter of the second year. Five credits are awarded for this problem-solving analysis written in standard essay form. For more information, further reference should be made to the Department Policy and Procedures Statement on the Master's Research Project.

Credit for Life/Work Experiences

In accordance with University policy, the Department has established its prerogative of *not* awarding credit for life/work experience in substitution for normal coursework in its graduate and undergraduate programs.

General Requirements

All Department students completing the master's program are also subject to graduate student regulations and degree requirements governed by the policies of the School of Public Affairs and Services and Florida International University.

LOCATION: North Miami Campus Only

DEGREE: *Master of Health Services Administration*

Major Required Courses:		*Quarter Hours*	**82**
HCA 5101	Introduction to Health Services	5	
HCA 5711	Statistical Methods for Health Services	3	
HCA 6114	Health Politics, Policy and Regulation	3	
HCA 6200	Health Economics and Insurance Principles	3	
HCA 6201	Financial Management of Health Systems	4	
HCA 6301	Hospital and Health Facilities Organization	4	
HCA 6316	Health Law and Legal Aspects of Management	3	
HCA 6431	Public Health and Environmental Management	3	
HCA 6434	Methods of Epidemiology	3	
HCA 6504	Health Care Management Theory and Practice	3	
HCA 6505	Personnel Management and Labor Relations	3	
HCA 6508	Organizational Behavior in Managing Health Institutions	3	
HCA 6691	Health Services Planning and Development	3	
HCA 6716	Research Design and Methodology	4	
HCA 6717	Quantitative Managerial Methods	4	
HCA 6719	Advanced Health Services Management and Research Seminar	3	
HCA 6732	Masters Research Project	5	
HCA 6801	Health Services Administrative Practicum	3	
HCA 6811	Administrative Residency I	10	
HCA 6812	Administrative Residency II	10	
Elective Courses:		*Quarter Hours*	**8**
HCA 5425	Long-Term Care Administration	2	
HCA 5135	Emergency Medical Care Systems I	2	
HCA 5136	Emergency Medical Care Systems II	2	
HCA 5318	Legal Issues and Ethics in Health Care Delivery and Management	2	
HCA 5507	Self, Group, and Human Relations	2	
HCA 5731	Proposal Writing, Grants, and Program Development	2	
HCA 6113	Comparative Health Systems	2	
HCA 6117	Policy Science and Health Policy Analysis	2	
HCA 6128	HMO and Ambulatory Care Administration	2	
HCA 6616	Mental Health Administration and Planning	2	

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HCA 6105	Behavioral Aspects of Health and Illness	2
HCA 6204	Health Facility Risk Management	2
HCA 6611	Health Planning Methods and Techniques	2
HCA 6610	Program Evaluation Methods in Health Care	2
HCA 6613	Design and Functional Planning of Health Facilities	2
HCA 6615	International Health Planning and Programming	2
HCA 6718	Advanced Applications of Operations Research	2
HCA 6905	Independent Study	2
		90

Master of Health Service Administration

Course Descriptions

Definition of Prefixes
HCA–Health Care Administration

REQUIRED COURSES

HCA 5101 Introduction to Health Services (5)(F)
In this course the student is introduced to organized health services in terms of delivery, financing, resources and function in American society. A wide variety of health care settings, including inpatient-ambulatory, public-private, clinical-administrative, etc., are examined through weekly three-hour lectures by faculty with varied expertise, followed by weekly two-hour seminars during which students will be encouraged to analyze and amplify the lecture material in small group discussions with faculty coordinators. This is a cornerstone course upon which the entire graduate curriculum is developed to a greater degree in more specialized depth.

HCA 5711/STA 5127 Statistical Methods for Health Services (3)(F)
This course presents tools for the analysis of data that arise in the health professions. Specific topics include: probability concepts, poisson distribution, nonparametric techniques, sample size determination, analysis of variance and advanced regression techniques. Students will be taught the use of a computerized statistical analysis package. Pre-requisite: HCA 4711 or introductory upper division college statistics course.

HCA 6114 Health Politics, Policy and Regulation (3)(SS)
In this course the role of government and forces in the private sector are analyzed in determining national, state and local health policies for American society. Various political structures and interest groups that influence the design and implementation of health policy are studied to understand the nature of their involvement in this process. The increasing role of regulation and public control in the health care industry will be examined in terms of current direction and impact on the management and financing of health facilities and service.

HCA 6200 Health Economics and Insurance Principles (3)(F)
Actuarial theories and general principles of health insurance are reviewed in relation to the history and special characteristics of public and private third-party prepayment arrangements. The economic effects of hospitals and medical practice are studied as influential forces in determining health services supply, demand, and pricing in the marketplace. Concepts of economic and cost-benefit analysis applied to health are introduced. Prerequisite(s): HCA 4203 or equivalent.

HCA 6201 Financial Management of Health Systems (4)(W)
The thrust of this course is to prepare health care managers at the executive level to address major issues and questions involving financial planning and management in their oganizations. The student will gain insight into current policies of financial control in becoming a responsible management decision-maker. Topics covered in the course include cost-funding, working capital management, capital financing, accounts receivable management, investments, internal auditing, and budgeting.

HCA 6301 Hospital and Health Facilities Organization (4)(F)
Administrative theory and management principles are examined in their application to the organizational analysis of hospitals and health care facilities. Students learn how formal structure, function, policies, inter-professional practices, community needs, and program resources are combined in delivering effective hospital and health services.

HCA 6316 Health Law and Legal Aspects of Management (3)(W)
This course includes a survey of currently significant issues in law applicable to the delivery of health care. Included are such areas of concern as professional malpractice, research on human subjects, the rights of patients, hospitalization of the mentally disabled, community participation in the health care system and collective bargaining with health care providers. Emphasis is placed on the relevance of practical problems faced in professional practice to the framework of law and public policy. Other topics include consent to medical and surgical procedures, medical-moral problems, concept of the corporation, principles of hospital liability, charitable immunity, medical records, contracts, taxation, regulatory authority, etc.

HCA 6431 Public Health and Environmental Management (3)(W)
This course examines the organization and functions of state and local health departments through the literature and specific case studies. A major health focus deals with environmental entities affecting health status and the programmatic measures and methods which are utilized to develop environmental control. Students are given an administrative overview of the broad program concerns receiving the attention of public health and environmental management agencies and regulatory efforts to cope with these regional and community problems.

HCA 6434 Methods of Epidemiology (3)(S)
The methods of epidemiology as applied by public health agencies are presented in historical and current perspective with disease and illness patterns of changing impact. How these techniques have transferred value to hospital, health agency, and community environments is a concern of administrators who have high level responsibilities for managing the resources to improve health status. This course provides students with a foundation for applying useful quantitative tools in monitoring and evaluating levels of illness and disease conditions.

HCA 6504 Health Care Management Theory and Practice (3)(W)
In this course the student is introduced to the role of modern management concepts, tools and techniques in health care administration, and to practical applications of management theory in health organizations. The course attempts to facilitate an understanding of the managerial role in a complex, dynamic, and multidimensional environment.

HCA 6505 Personnel Management and Labor Relations (3)(S)
This course studies personnel structure, practices, and problems in hospitals and other health organizations. Topics include salary and wage determinations, task analysis, employee recruitment, selection, testing methods, staffing requirements, and evaluation techniques

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through use of case studies. The course also reviews governmental regulations and policies affecting the conduct of parties in bargaining relationships between labor and management in health care settings, especially hospitals. Theory and principles of collective bargaining, negotiation strategies and tactics, methods of handling union grievances, understanding of agreement clauses, and benefit plans for health workers are additional topics considered.

HCA 6508 Organizational Behavior in Managing Health Institutions (3)(SS)

General theories of organizational behavior and executive functions are examined in their application to hospitals and other health agencies. The nature of administrative process, the role of individuals and groups, human relations, leadership and power, bureaucracy, authority, communications, goal and policy formulation, and functional strain, among other elements, are researched in the context of defining organizational effectiveness. Practical methods for organizational analysis are tested for utility.

HCA 6691 Health Services Planning and Development (3)(S)

This course is an introduction to the formal organization and professional practice of health planning. Community, regional, interorganizational, and system theories of coordinated planning are explored in relation to political, social, and economic forces of change that both nurture and vex the state of the art. Linkages among planners, agencies, and plans are examined for differences in structural authority, operating policies, and methods. Various health system plans are analyzed in student projects to gain a sense of the actual work that typifies this field.

HCA 6716 Research Design and Methodology (4)(S)

In this course the student is introduced to the formal study of research design and methodology in health care settings. The didactic portion of the course consists of lectures and discussions on such topics as the formulation of research problems, hypothesis generation and testing, sampling methods, research design, and data analysis. In the latter part of the course the student is given opportunity to select a research topic and prepare a complete proposal within acceptable professional guidelines. Prerequisite(s): HCA 5711.

HCA 6717 Quantitative Managerial Methods (4)(SS)

This course provides health care managers and planners with a theoretical and practical knowledge of operations research techniques such as linear programming, computer simulation, and decision analysis. The primary objective is to give students experience in formulating and solving typical management problems and acquaint them with the advantages and limitations of these quantitative techniques. The course will make use of case study material and actual operational data from health care institutions so that students may experience direct line applications of these techniques.

HCA 6719 Advanced Health Services Management and Research Seminar (3)(F)

This is an integrative capstone course designed for students in the final stage of their program as an opportunity to integrate the theoretical and practical knowledge acquired in other courses and activities of the curriculum. Selected case studies and relevant research drawn from the literature in health care management provide the substantive framework for seminar analysis of issues and policy questions which may invite attack for resolution through use of various managerial strategies and methods. Each student will have an individual project responsibility to contribute as an analytical problem-solving topic for presentation during the course. Prerequisite(s): Completion of all other didactic course work in the program curriculum.

HCA 6732 Masters Research Project (5)(F,W,S,SS)

In this course the student will be afforded the opportunity to conduct a research project on a specific health care management problem in a community or institutional setting. A formal proposal will be prepared first and, after faculty advisor approval, the project will be carried out to conclusion in a final professional report. Students will be expected to demonstrate during the period of this research project that they can implement theoretical knowledge and skills learned earlier in research methods and design. Prerequisite(s): HCA 5711 and HCA 6717.

HCA 6801 Health Services Administrative Practicum (3)(SS)

This course is designed to provide weekly supervised off-campus field experience and observational studies of a wide variety of health services organizations, including hospitals, neighborhood centers, insurance programs, planning agencies, mental health facilities, etc. Impressions and information obtained from each visit are reviewed in regular student-written reports and discussions with accompanying faculty.

HCA 6811 Administrative Residency I (10)(F.W.S,SS)

In this course the graduate student who has completed all required course work will be able to acquire and practice professional management skills in a health care setting under the supervision of a program preceptor. The student will be given opportunity to observe, evaluate and appropriately participate in the administrative processes of the health care organization where placement has been arranged. Evaluation of the student's residency experience by the faculty advisor and preceptor will be based on 1) examination of monthly written reports prepared by the student detailing his/her experiences in the agency/institution, and 2) progress reports submitted by the preceptor and student at the end of the quarter. Prerequisite(s): Completion of all required course work, including the masters project, and approval of the field placement by the faculty advisor and course coordinator.

HCA 6812 Administrative Residency II (10)(F,W,W,SS)

This course is a direct continuation for a second of the two-quarter Administrative Residency for the student already in placement from the preceding quarter. Prerequisite((s): HCA 6811.

ELECTIVE COURSES

HCA 5425 Long-Term Care Administration (2)(F)

This course reviews the aging process and health problems involved in gerontology and institutional care of the aged afflicted with chronic diseases. How such facilities providing services for these patients are organized and managed for maximum effectiveness is a major thrust of study, with the objective of preparing students toward the qualifications for licensure examination as nursing home operators. Rehabilitation services administration is included as a collateral function of long-term care responsibility and specialized management application.

HCA 5135 Emergency Medical Care Systems I (2)(F,S)

This course is designed to explore the development and implementation of emergency medical service systems. It covers history, legislation, structure and planning of emergency medical services with the objective of preparing managers for EMS systems (such as emergency departments in hospitals, police-fire rescue squads and coast guard, etc.). This course is the first of a two-part series which also serves as the prerequisite preparation for special certification in this field as provided through the department and this University (see appropriate section of F.I.U. catalog).

HCA 5136 Emergency Medical Care Systems II (2)(W,SS)

This is the second part of a two-course series in-

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tended to explore emergency medical service topics at the more advanced levels with emphasis on the special role and skills required of EMS administrators and planners. The approach taken is one of a seminar-workshop environment with variable topic selection depending upon current developments and the expanding qualifications becoming required of health personnel in this field. For further information on the Department's special certification in EMS qualification, see the appropriate section of the University catalog on Certification Programs.

HCA 5318 Legal Issues and Ethics in Health Care Delivery and Management (2)(F)(S)
The legal basis of regulatory boards and agencies is examined in this course, including the relationships which exist between professionalism, legality, consumerism, and ethics in delivering health services in various settings (e.g., urban and suburban hospitals, health centers, nursing homes, home health care agencies, etc.). The relationship between organizational and productive efficiency in patient care will be treated in terms of the ethical roles of both providers and consumers.

HCA 5507 Self, Group, and Human Relations (2)(W)
The fundamentals of appropriate use of "self" in management and administrative roles are studied in this course. The human relations aspect of management and the theories of small and large group dynamics are examined. Ideas and opinions relating to authority, power, leadership, and intimate space are explored to determine their validity. Concepts of ethical humanism and transactional analysis will be presented to assist the student in realizing self-awareness, self-responsibility, authenticity and creativity.

HCA 5731 Proposal Writing, Grants, and Program Development (2)(S)(SS)
This course provides the basic tools for development of writing and communications skills in the areas of program design, evaluation and funding (e.g., grantsmanship). The course reviews governmental and nongovernmental grant sources and the fundamentals of grant preparation, fund raising, and implementation. Students are also introduced to approaches and techniques in developing confidence and competence in the execution of daily writing and other forms of administrative communication dealing with diverse audiences, such as clinical and professional staff, patients, employees, unions, community groups, agency officials, etc.

HCA 6113 Comparative Health Systems (2)(W)
In this course the student who is familiar with the organization of the U.S. health care system has an opportunity to examine in a comparative fashion selected foreign health care systems in order to distinguish the major components from other systems with those in the U.S. In particular, the student will examine how differences in social structure, values, geography, politics and economic systems contribute to a variety of health care delivery models operating in the world today. The student will prepare an analytical study which suggests ways in which the current U.S. system can be reorganized through the adoption of elements from other countries. Prerequisite(s): HCA 5101.

HCA 6117 Policy Science and Health Policy Analysis (2)(F)
This course examines the theory, methods and practice of formulating, legitimizing, managing and evaluating health policy. The role of administrators, interest groups, lobbies, courts, legislators and political party philosophy in establishing and changing health policies is explored in the analytical context of emerging policy science. Students are directed toward developing model strategies for conflict-resolution using negotiating tactics, sanctions, regulatory controls, and incentives for effective policy allocation of health resources. Prerequisite(s): HCA 6114.

HCA 6128 HMO and Ambulatory Care Administration (2)(W)(SS)
This course involves an overview of the management process employed in health maintenance organizations (HMOs) and other group medical practices operating under various financial arrangements, including prepayment. Topics include analysis of the organization, delivery and planning of ambulatory care in hospital and free-standing facilities with a focus on preventive care, cost-containment, accessibility and availability of primary health services at the community level. Case studies are used to review successes and failures in group practice organization with the objective of exploring ways to increase both its quality and cost-effectiveness. Prerequisite(s): HCA 5101, HCA 6200 and HCA 6301.

HCA 6616 Mental Health Administration and Planning (2)(W)(SS)
Mental health organizations are studied in this course as comparative models for delivering a wide range of programs and services to patients with various psychiatric conditions, alcoholism, mental retardation, drug addiction, and related disorders. Current laws, institutional policies, funding and planning for community mental health services are surveyed in relation to their impact. The specialized functions of administrators and planners are identified with the objective of introducing students to the broader organizational and systems environment of human services delivery. Prerequisite(s): HCA 5101.

HCA 6105 Behavioral Aspects of Health and Illness (2)(S)
In this course the student is broadly exposed to the behavioral perspectives of health and illness as they impact on human behaviors in the delivery and receipt of health care. As future administrators, students will be sensitized to the cultural, attitudinal, religious, ethnic, social and psychological factors which affect client behaviors and either impede or facilitate the health care process and its management. Prerequisite(s): HCA 6508.

HCA 6204 Health Facility Risk Management (2)(F)
In this course the principles of risk management and insurance are used as a basis for educating the student in the development of an institutional program of risk management. Topics address risk management theory, risk identification, liability loss exposures, claims management, loss prevention, and risk program financing. Special attention is given to the issue of self-insurance and related factors, such as loss-funding, "captive" insurance companies, and excess insurance markets. Relevant econometric considerations are also discussed. Prerequisite(s): HCA 6200 and HCA 6201.

HCA 6611 Health Planning Methods and Techniques (2)(F)
The technical elements are examined in model-building of complex information and control systems for corporate (institutional), program (multi-unit), and community (comprehensive) planning of health care. Methods and techniques include location optimization or "medical" geography, market modeling, health status measurement, forecasting (e.g., "Delphics"), and cost-containment strategies currently employed by health planners. Prerequisite(s): HCA 6691 or equivalent.

HCA 6610 Program Evaluation Methods in Health Care (2)(SS)
Concepts of health "program," "objectives," and "evaluation" are defined in this course for the operational context of current applications by administrators and evaluation researchers. Various evaluation models and study designs are investigated to determine their relative value for the effectiveness, efficiency, adequacy, appropriateness, and side-effects of different program activities. The course uses case studies

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Public Administration

and student projects to test the strengths and weakness of various program evaluation models and methods. Prerequisite(s): HCA 6691 and HCA 6716.

HCA 6613 Design and Functional Planning of Health Facilities (2)(SS)
Architectural design, construction management, and functional program planning are surveyed in the building process of hospitals and other health care facilities. Corporate development practices are applied to capital financing, site preparation, legal and regulatory sanctions, work and materials scheduling, code and equipment requirements, traffic flows, and cost-saving strategies such as fast-track and modular units. Case studies and field visits are used to help students in their "studio" projects to design and program various proposed facility plans. Prerequisite(s): HCA 6691 or equivalent.

HCA 6615 International Health Planning and Programming (2)(F,SS)
This course prepares the student to appreciate the social, political, and cross-cultural aspects of international health care program planning and development found in selected countries of mixed-economies (e.g., Latin America and the Circum-Caribbean). The problems and "pitfalls" imbedded in the planning process at national and regional levels in these countries are the focus of cooperative approaches explored. Emphasis is placed on basic public health and environmental services or institutional and primary care as appropriately fits the stage of growth in undeveloped, developing, and developed countries. Prerequisite(s): HCA 6431 and 6114.

HCA 6718 Advanced Applications of Operations Research (2)(F)
This course teaches various advanced operations research and industrial engineering techniques for health care managers to apply in systems analysis and quantitative decision-making. Methods include game theory, graph and network analysis, critical path and PERT, queueing models, integer and nonlinear programming techniques, and computer simulation. Optimization techniques and the use of the simplex algorithm in problem-solving are examined as they apply to improved administrative functioning in health care settings. Prerequisite(s): HCA 6716 and 6717.

HCA 6905 Independent Study (2)(F,W,S,SS)
This course is designed to allow students an opportunity for in-depth research or an action-oriented project carried out under the supervision of their faculty advisor. As an elective, an independent study should only be taken after substantial course work has already been completed in the program curriculum. In all cases preparation and approval for this course should be arranged during the academic quarter preceding the quarter planned for the study to begin. Prerequisite(s): Permission of faculty advisor and course coordinator.

Public Administration

J. Arthur Heise, *Associate Professor and Chairperson*
Adam W. Herbert, *Professor and Dean, School of Public Affairs and Services*
K. William Leffland, *Professor and Dean, International Affairs Center*
G. Ronald Gilbert, *Associate Professor*
Myung S. Park, *Associate Professor*
Thomas J. Patka, *Assistant Professor*
Ann-Marie Rizzo, *Assistant Professor*
Henry B. Thomas, *Assistant Professor and Associate Dean, School of Public Affairs and Services*
John G. Corbett, *Visiting Assistant Professor*

LOCATION: North Miami Campus—courses may be offered on the Tamiami Campus or other locations.

DEGREE: *Bachelor of Public Administration*

The Bachelor of Public Administration degree within the School of Public Affairs and Services is offered mainly for students interested in beginning a public service career upon completion of their undergraduate work but also for those who wish to continue in public administration on the graduate level.

Admission Requirements: A student who has completed an Associate of Arts degree at a Florida public community college, or has earned 90 quarter hours (60 semester hours) of college credit at any other accredited institution at an acceptable performance level.

LOWER DIVISION PREPARATION:

Included in the applicant's Associate of Arts degree or equivalent must be one year of English composition, American history, introductory algebra, and economics; and one course in American government, sociology and psychology. The entering student who has not taken these courses must enroll in appropriate courses at FIU. These courses must be taken in addition to the 90 quarter hours required for the B.P.A. degree.

UPPER DIVISION PROGRAM:

Required Courses:		*Quarter Hours*
		35
PAD 3034	Public Policy and its Administration	
PAD 3702	Quantitative Techniques for the Public Sector (prerequisites: STA 3122 or COP 3112 or equivalent)	
PAD 4024	Concepts and Issues in Public Administration	
PAD 4104	Organization and Administrative Theory	
PAD 4223	Public Sector Budgeting	
PAD 4414	Personnel Skills for Administrators	
PAD 4804	Government and Administration of Metropolitan Areas	

NOTE: Students must maintain a 3.0 average in the seven required courses to be awarded the B.P.A.

Area of Concentration Courses: 20

Four courses are to be taken in a selected area of concentration relevant to public administration.

Option 1: The student can complete a recommended area of concentration integral to public administration in one of the following subfields:

(a) Administrative Theory and Behavior (Prerequisite: PAD 4104)
Two of the following:

PAD 4432	Administrative Leadership and Behavior
PAD 4103	Politics of Administrative Organization
PAD 3430	Personal Growth and Administrative Development
PAD 3003	Politics of Public Bureaucracy

Plus two of the following:

INP 3002	Introductory Industrial Organizational Psychology
SOC 5261	Industrial Psychology
SIC 4406	The Problems of Bureaucracy in the Modern World

(b) Public Personnel (Prerequisite: PAD 4414)
Four of the following:

PAD 3413	Organizational Group Processes
PAD 5427	Collective Bargaining in the Public Sector
MAN 4320	Personnel Recruitment and Selection
MAN 4330	Wage and Salary Administration

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Public Administration

MAN 4322	Personnel Information Systems (Prerequisites: CIS 3000 and MAN 4301)
INP 4203	Personnel Psychology
INP 3002	Introductory Industrial/ Organizational Psychology

(c) Urban Policy and Administration (Prerequisite: PAD 4804)
Four of the following:

PAD 3033	Administrators and the Legislative Process
PAD 4103	Politics of Administrative Organizations
POS 3424	The Legislative Process
POS 3122	State Government and Politics
PUP 4314	American Ethnic Politics
POS 4463	Interest Group Politics
PUP 4203	Environmental Politics and Policy
POS 3153	Urban Politics
POS 4154	Topics in Urban Politics and Policy

(d) International Public Administration (Prerequisite: PAD 3834)
Four of the following:

MAN 4610	International and Comparative Industrial Relations
INR 4283	International Relations, Development and the Third World
CPO 3002	Introduction to Comparative Politics
INR 3002	Dynamics of World Politics
INR 4931	Topics in International Politics
CPO 4034	The Politics of Development and Underdevelopment

(e) Public Budgeting and Finance (Prerequisite: PAD 4223)
Four of the following:

PAD 4032	Public Choice
PAD 3204	Financing Public Organizations
ECO 3101	Theory of Price
ECO 4504	Public Choice and the Public Finances
ECP 4222	Manpower Problems and Programs
ACC 5865	Governmental and Institutional Accounting (Prerequisite: ACC 4122 or ACC 5311 or equivalent)
ACC 3300	Accounting for Decisions
HCA 4203	Health Care Financial and Accounting Management

(f) Public Sector Analysis (Prerequisites: PAD 3034 and PAD 3702)
Four of the following:

CIS 3000	Introduction to Information Systems
HSC 4201	Information Systems
QMB 3150	Application of Quantitative Methods in Business
COC 3400	Computers and Society
HCA 4711	Quantitative Methods for Health Care
STA 3163	Introduction to Statistical Analysis I
STA 3164	Introduction to Statistical Analysis II

Option 2: The student can select a recommended area of concentration in a functional area closely related to public administration. They include but are not limited to the following:

(a) Criminal Justice
Two of the following:

CCJ 3020	An Overview of Criminal Justice Systems
CCJ 3600	The Nature and Causes of Crime
CCJ 3100	Law Enforcement Systems
CCJ 3300	Correctional Philosophy, Theory and Practice

And two of the following:

POS 3603	Constitutional Law: Powers
POS 3604	Constitutional Law: Limitations
POS 4284	Judical Behavior
POS 4493	Politics of Judical Administration

(b) Applied Urban Administration:
Four of the following:

PAD 4603	Administrative Law
PUP 4520	Politics of Urban Transportation Decision-Making
ETC 3570	Introduction to Transportation Systems
URP 3000	Urban Planning Concepts
URP 4021	Urban Land Use Planning
ARC 4335C	Site Development
POS 4154	Topics in Urban Politics and Policy: Urban and Environmental Policy and Design

(c) Social Work
Students must take these required courses in sequence:

SOW 3113	Dynamics of Human Behavior in the Social Environment (Prerequisites: PSY 3013, DEP 3000 or their equivalents)
SOW 3232	Social Welfare Policy and Services I
SOW 3313	Methods of Social Work Practice I

Depending on the individual's interests in the field, he or she may select *one* of the following with the approval of an advisor:

SOW 4125	Dynamics of Human Behavior in the Social Environment
SOW 4233	Social Welfare Policy and Services II (Prerequisites: SOW 3232, SOW 3511 and SOW 3522)
SOW 4322	Methods of Social Work Practice II (Prerequisites: SOW 3313, SOW 4124 or their equivalents)

Option 3: The student can select an area of concentration to fulfill his/her personal needs by designing an individual program with the advice and approval of the public administration faculty.

Elective Courses:

Seven courses will consist of general coursework to be completed outside the Department of Public Administration. These courses are to be selected with the approval of the Department of Public Administration from offerings by the Departments of English, Economics, Mathematical Sciences, Sociology/Anthropology, Political Science and elsewhere.

Master of Public Administration

LOCATION: Tamiami Campus, North Miami Campus, and off-campus locations.

DEGREE: *Master of Public Administration*

The Master of Public Administration degree within the School of Public Affairs and Services is offered to prepare individuals for successful public service careers. Given, on the one hand, the varying needs of the students, and on the other, the demand for highly qualified professionals, the MPA program is demanding but flexible. Therefore, the Department seeks serious students who challenge it to provide them with a genuine learning experience tailored to their individual needs.

Admission Requirements: All applicants must hold a baccalaureate degree from a regionally accredited college or university. In addition, each applicant must have a Graduate Record Examination (GRE) composite score of at least 1000 on the Verbal and Quantitative sections *OR* a grade point average (GPA) of 3.0 or bet-

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ter (on a 4.0 scale) for all college coursework on the junior and senior level. An applicant with a 3.0 GPA and above is still required under Board of Regents regulations to take the GRE.

Program of Study

The Master of Public Administration program is a 60 quarter hour program composed of five required courses (25 quarter hours) dealing with public administration: the political, social and economic environment; management theories and organizational behavior; financial processes; research methodology and public policy.

Required Courses:		*Quarter Hours*
		25
PAD 6053	Political, Social and Economic Context of Public Administration	
PAD 6106	Organizational Theory and Administrative Behavior	
PAD 6227	Public Finance and the Budgetary Process	
PAD 6706	Research Methods in Complex Public Organizations	
PUP 6005	Public Policy	

Elective Courses The remaining 35 quarter hours can be earned by pursuing one of three different tracks. These tracks are based on the fact that in general terms the students in the program fall into two major categories: those who already have public sector experience, and those who wish to embark on public service careers but whose relevant experience is limited. To accommodate the diverse needs generated by those backgrounds, three tracks are included in the program.

Track I is aimed at persons seeking a more general background in public administration. Such students need to take at least one course from each of five modules encompassing different aspects of public administration. Those students who need to take courses in public personnel administration and quantitative methods may count these courses as part of the five they select from the various modules.

Track II seeks to accommodate students who wish to incorporate an internship into their program or those already at work in the public sector who wish to link their administrative experience to their MPA degree program. Students engaged in an approved internship program may take 1–10 quarter hours by enrolling in PAD 6946, Public Administration Internship. Working under close faculty supervision, these students will be expected to complete significant projects that relate their academic work to their real-life experience as an intern. A similar approach is used for those students already in a public sector position. Their work experience will be used in lieu of an internship. Those students may take 1–10 quarter hours by enrolling in PAD 6907, Independent Study in Public Administration. Also working closely with a faculty advisor, they, too, need to complete a significant project that evaluates their work-related experiences. All Track II students need to choose electives from two or more modules to complete the additional coursework needed for the 60 quarter hours required for the MPA.

Track III is for those students who wish to concentrate on a particular area relevant to public administration, for instance, public health management, public sector finance and accounting, criminal justice, social work, etc. In such cases, students may take up to 25 quarter hours from other departments within the university which offer courses relevant to the area of concentration. Students who select this approach must identify their area of concentration early in their course of study, and all courses to be taken outside the Department of Public Administration must be approved prior to registration. Any remaining course work required to complete the 60 quarter hour program is to be chosen from elective courses in Public Administration.

Module I: Values and Administration
- PAD 5041 Values and Technology in Modern Society
- PAD 6035 Public Interest and the Public Trust
- PAD 6042 Democracy and the Administrative State
- PAD 6605 Administrative Law and Procedures

Module II: Organizational Behavior
- PAD 5427 Collective Bargaining in the Public Sector
- *PAD 6417 Public Personnel Administration
- PAD 6437 Dynamics of Individual Growth
- PAD 6109 Organizational Development and Change

Module III: Quantitative
- *PAD 6701 Quantitative Methods and Computer Skills
- CIS 6204 Management Information Systems
- PUP 6006 Public Policy Analysis and Evaluation

Module IV: Administrative Issues
- PAD 5435 Administrator and the Role of Women
- PAD 5443 Public Administrator and Media Relations
- PAD 6043 Government and Minority Group Relations

Module V: State and Local Governments
- PAD 6816 Regional and State Government Administration
- PAD 6807 Urban and Municipal Government Administration

Module VI: International
- PAD 6838 Development Administration
- PAD 6836 International Public Administration

*All students will be required to demonstrate competence in quantitative methods and in public personnel administration. Otherwise they need to enroll in the courses designed to provide these skills, PAD 6701 and PAD 6417.

NOTE: Individuals taking courses as special students are reminded that only up to fifteen quarter hours can be transferred toward their degree after they have been admitted to the program.

Course Descriptions

Definition of Prefixes

CIS–Computer and Information Systems: MAN–Management: PAD–Public Administration: PUP–Public Policy.

CIS 6204/MAN 6830 Management Information Systems (5)

Introduction to the application of computers to information processing problems in organizations. This includes a survey of the basic computer hardware and software concepts necessary for users to work with information processing personnel. The rudiments of a computer programming language will be taught, and applied to data processing problems. Consideration will also be given to the managerial aspects of information systems planning and development

PAD 3033 Administrators and the Legislative Process (5)

A study of executive-legislative interactions; the impact of legislation and legislative processes on administrative policy decision-making and implementation; the influence of administration on the legislating process.

PAD 3034 Public Policy and Its Administration (5)

Examines the formulation, implementation and evaluation of governmental efforts at federal, state and local levels.

PAD 3204 Financing Public Organizations (5)

Financial management in public organizations. The securing of funds through taxes and bond issues. The management of funds, and expenditure decisions.

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PAD 3413 Organizational Group Processes (5)
The impact of various organizational climates, tasks, roles and reward systems, on the behavior of both the individuals and groups of employees in public organizations. Particular attention is given to alienation and motivation in job effectiveness and Public Service.

PAD 3430 Personal Growth and Administrative Development (5)
The administrator as a person. Development of interpersonal skills. Self evaluation and career planning. Training and education for the public service sector.

PAD 3702 Quantitative Techniques for the Public Sector (5)
Quantitative techniques useful to public administration, non-parametric techniques, probability concepts, and decision techniques are presented, as well as concepts underlying the use of data systems. Prerequisites: STA 3122, or COP 3112, or equivalent.

PAD 3834 International Comparative Administration (5)
This course is an introduction to a wide range of scholarly and practical ("applied") interests. Emphasis is on institution-building and development administration, particularly within the Third World countries.

PAD 4024 Concepts and Issues in Public Administration (5)
The function of administrative institutions in society. The growth of administration through the bureaucratic model both as an art and a science. Contemporary and comparative forms and theories of organization. Responsibilities of public servants.

PAD 4032 Public Choice (5)
Some historical analysis of the origin and concept of the public interest in public administration. The various formulations of public administration as a concept, and contemporary interpretations of same. Specific role definitions and concepts of the public interest and public policy.

PAD 4040 Public Values, Ethics and Morality in Changing Environment (5)
Theories of value: ethical systems and their influence on administration, behavior and process: the administrator as an ethical actor: value conflict and resolution; the philosophical basis of American thought.

PAD 4103 Politics of Administrative Organization (5)
The role of political processes in relationship to public organizations and the types of intra- and inter-organizational politics which are unique to public organizations. Effects of these political processes upon organizational performance and their role in promoting or thwarting organizational change.

PAD 4104 Organization and Administrative Theory (5)
Historical survey of theories of public organization and of contemporary and emerging theories and management issues. With special attention to the role of bureaucratic theory and behavior. Case investigation of bureaucratic experience in federal, state and local levels will be conducted.

PAD 4110 Administrative Interaction in the Public Sector (5)
Definition and analysis of administrative interfaces with multiple and varied public and private organizations. A study of the role expectation, pressures and opportunities of the administrator in a complex environment.

PAD 4223 Public Sector Budgeting (5)
The theory and practice of various approaches to budgeting, including time-item, performance, PPBS budgeting. Special emphasis on the role of the budget in shaping the program and performance and policy direction of public organizations.

PAD 4414 Personnel Skills for Administrators (5)
The general nature of public personnel administration; the development of the civil service system; concepts and issues currently applicable at the federal, state and local levels of government.

PAD 4415 Administration of Personnel Resources (5)
Problems of training in government service and management of human resources development; the concept of civil service career systems; evaluation of public personnel systems; human relations in supervision; and personnel theory are examined.

PAD 4432 Administrative Leadership and Behavior (5)
Designed to expose students to a systematically related set of concepts for diagnosing human behavior in organizations; and to establish a positive value for the analysis of problems involving people, structure, environment, task technology, and situational climate.

PAD 4603 Administrative Law (5)
Surveys the principles of law from the perspective of the public administrator; administrative procedure; procedural due process; delegation of legislative power; regulatory administration; conflict-of-interest statutes, etc.

PAD 4804 Government and Administration of Metropolitan Areas (5)
An intensive analysis of administrative problems in large complex urban areas encompassing many political entities. Examines overlapping relationships among municipalities with special attention given to Dade County as well as current trends in public management and future directions for change.

PAD 4905 Independent Study in Public Administration (1–10)
Individual conferences, supervised readings; reports on personal investigations; and similar undertakings. Prerequisite: Consent of faculty sponsor and Department Chairperson required.

PAD 5041 Values and Technology in Modern Society (5)
Surveys personal and societal value assumptions in the context of the technological society. Examines organizational-societal value structures, and the ways in which technology creates rapid change and new alternatives in values. Also interrelationship of the past, present and future is explored, through futurism and forecasting techniques.

PAD 5427 Collective Bargaining in the Public Sector (5)
The course deals with the nature and implications of collective bargaining for managers and employees in (and students of) public organizations. The course emphasizes similarities and differences between the private and public sectors, as they apply to collective bargaining.

PAD 5435 Administrator and the Role of Women (5)
The course is designed for women and men who are interested in moving into management positions, or who have done so and want to broaden their understanding of the changing role of women. Classes will allow for experimental as well as academic exploration of the issues. The course will also explore design, implementation, and evaluation of affirmative action programs.

PAD 5443 The Public Administrator and Media Relations (5)
Surveys the government-mass communication media relationship, and then concentrates on the ways in which public managers handle media relations. Emphasis throughout is placed on questions of information-handling unique to public organizations, involving, for example, adherence to Florida's Sunshine Law and the Federal Freedom of Information Act.

PAD 6035 Public Interest and the Public Trust (5)
Analysis of the meaning of the public interest, using both experimental and cognitive tools. The purpose is to allow individuals in the

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course to clarify their current definitions of the concept, and to be exposed to alternative points of view. The course is intended for everyone in the public sector, and all those who have the term "public" in their repetoire of justifications.

PAD 6042 Democracy and the Administrative State (5)
Juxtaposes the contemporary administrative condition of American government with the values of the democratic state. Different approaches to democracy—in practice as well as in theory—will be analyzed, and their implications for public organizations and individual administrators examined.

PAD 6043 Government and Minority Group Relations (5)
Explores the pressing contemporary issue of the relationship between government and minorities. Examines the clash between established institutional values and minority group values, and surveys remedial programs aimed at dealing with the problem. Comparative case studies will be used to analyze public agencies' internal relations with minorities (recruiting, selection, etc.), as well as their different responses to the minority groups they serve.

PAD 6053 Political, Social and Economic Context of Public Administration (5)
Examines the context in which public organizations operate, stressing the relationship between such organizations and their multifaceted environment. Emphasis is on examining relevant social and cultural mores and patterns, political values and processes, governmental institutions, economic systems, resource availability, and other environmental factors currently significant to public organizations.

PAD 6106 Organization Theory and Administrative Behavior (5)
Historical perspective and philosophical foundations of contemporary and emerging organization theory and administrative behavior, with emphasis on concepts of administrative leadership, the organization's members and systems, group dynamics, socio-psychological aspects of organization and management.

PAD 6109 Organizational Development and Change (5)
Contemporary approaches to improving the overall effectiveness of public organizations through the utilization of the applied behavioral sciences: personal and executive development programs, team building, action research, etc. Survey of research on the effects of organizational development programs, with special reference to public organizations.

PAD 6227 Public Finance and the Budgetary Process (5)
Examines the theory and practice of public budgeting and its relationship to the administrative processes of control, management and planning. Special emphasis will be given to the social balance question; the kinds and scope of government expenditures; the fiscal role of government in a mixed economy; sources of revenue available to government; administrative, political and institutional aspects of the budget and the budgetary process; and problems and trends in intergovernmental financial relations.

PAD 6417 Public Personnel Administration (5)
This course focuses on the fundamentals of public personnel administration applied to general and specific issues of civil service. Some of the specific issues which will be considered are: the merit system and civil service history and development; manpower development and training; the application of the behavioral approach in personnel administration; unique public personnel management problems; governmental unionization and collective bargaining; and future perspectives in personnel administration.

PAD 6437 Dynamics of Individual Growth (5)
This course focuses on the importance of small group theory to the personal growth of the administrator, and the role of interpersonal abilities in effectively serving client groups. The course also deals with the expansion of the phenomenological world view of each student; and will look at existential theory and the dilemma of personal growth.

PAD 6605 Administrative Law and Procedures (5)
Emphasizes the responsibilities public administrators have under local, state, and federal laws. Explores such concepts as client responsiveness under the law; the regulatory process; state administrative law systems; the executive order process; the relationship between administrative law and the checks-and-balance system; discretionary justice; and others.

PAD 6706 Research Methods in Complex Public Organizations (5)
Theories and concepts of research and evaluation. Specific focus given to action components of the research process: design and formulation, strategies and methodological tools for conducting research. Discussion of the role of research in administrative decisions and in testing ways to implement public policy. A review of contemporary critiques on research design.

PAD 6807 Urban and Municipal Government Administration (5)
Detailed examination of problems facing the municipal administrator; of the pressures upon the contemporary urban environment; and of the administration of large metropolitan areas comprised of numerous entities. Emphasis will be on determination of current trends, discussion of cases, and arrival at suggested solutions.

PAD 6816 Regional and State Government Administration (5)
Surveys the historical development of regional administration, analyzes present administrative problems of the states, and explores contemporary and suggested remedial policies. Emphasizes the complex problems of the institutional relationships among local, state and regional governments, and their implications for public policy-making.

PAD 6836 International Public Administration (5)
The role of public administration systems around the world; and the impact of political and socio-cultural frameworks on administration. Focus on national and state organizations' politics, economics, problems, and possibilities. A review of scope and programs of contemporary international public administration organizations.

PAD 6838 Development Administration (5)
The role of public administration in national development, with specific attention to theories of economic aid from external sources, and the effects of this aid. Theories and policies of economic and social development are explored; and particular attention is given to the role of the United States in strengthening administrative capabilities as an important means for achieving developmental goals in selected countries.

PAD 6907 Independent Study in Public Administration (1–10)
Individual conferences; supervised readings; reports on personal investigations and similar undertakings. Consent of faculty sponsor and Department Chairperson required.

PAD 6915 Independent Research in Public Administration (1–10)
An individualized research project and report which, if feasible, should include field work with a public organization. Permission of a faculty advisor is required before registering for the course, which should be taken during the last half of the student's graduate program.

PAD 6946 Public Administration Internship (1–10)
Supervised work in a public or quasi-public organization. Should not be undertaken until completion of required courses in public ad-

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Social Work

ministration program. Consent of faculty advisor and Department Chairperson required.

PUP 6005 Public Policy (5)
An intensive analysis of the normative theories of public policy making, with emphasis on the processes by which policy choices are made and implemented by government agencies. The current trends and perspectives of effective policy development (such as participatory democracy, multi-valued choice, rationality versus extrarationality, policy environments, and policy roles of proactive public administration) are examined.

PUP 6006 Public Policy Analysis and Evaluation (5)
A framework for evaluating public policy-making will be presented. The emphasis will be on criteria and methodologies available for choosing among alternative courses of action. The systems approach, alternative futures, and nth-order consequences of policies will be analyzed.

QMB 6603 Quantitative Methods in Management (5)
Introduction to basic quantitative tools for the analysis of problems arising in the management of organizations, and the application of these tools to real-life problems. (No credit will be given to students who have had undergraduate or graduate equivalents.)

Social Work

L. Yvonne Bacarisse, *Associate Professor and Chairperson*
Sanford Kravitz, *Distinguished Professor*
Monte Koppel, *Professor*
Rachel Marks, *Professor*
James E. Garrett, *Associate Professor*
Rosa Jones, *Associate Professor*
Julia Nooe, *Associate Professor*
Magaly Queralt, *Associate Professor*
Betsy Smith, *Associate Professor*
Raymond Berger, *Assistant Professor*
Esther Eichenbaum, *Assistant Professor*
Mary Helen Hayden, *Assistant Professor*
Ana Rivas-Vazquez, *Visiting Assistant Professor*

The program offers an integrated educational experience that combines the theoretical and the practical. It is designed to prepare the student for beginning professional practice in social work, for entrance into a graduate school of social work, and for participation in society as an informed citizen.

The six-quarter program includes a sequence of academic courses and field instruction under qualified supervision in social agencies in South Florida.

The program is accredited by the Council on Social Work Education.

LOCATION: North Miami—Courses may be offered on Tamiami Campus or other locations.

DEGREE: *Bachelor of Science in Social Work*

LOWER DIVISION PREPARATION:
The student desiring to major in social work must have completed the Associate of Arts degree at a Florida public community college, or equivalent work from an accredited institution.

Required Courses: Before admission to the social work program, the student must complete courses in introductory psychology, statistics, American government, and principles of economics, and two courses in sociology.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses:		**70**
Core Courses:		**65**
SOW 3113	Dynamics of Human Behavior in the Social Environment I	5
SOW 3232	Social Welfare Policy and Servicees I	5
SOW 3302	Introduction to Social Work Philosophy and Practice	5
SOW 3313	Methods of Social Work Practice I	5
SOW 3511	Field Experience I	9
SOW 3522	Integrative Field Seminar I	1
SOW 4125	Dynamics of Human Behavior in the Social Environment II	5
SOW 4233	Social Welfare Policy and Services II	5
SOW 4322	Methods of Social Work Practice II	5
SOW 4332	Methods of Social Work Practice III	5
SOW 4403	Methods of Community Research	5
SOW 4512	Field Experience II	9
SOW 4523	Integrative Field Seminar II	1
Courses in Another Discipline:		**5**
ANT 4451	Racial and Cultural Minorities	5
SOC 4745	Minorities (Race and Ethnic Relations)	5
SOC 4746	Social Conflict in Multi-Ethnic Societies	5
Electives: with approval of the faculty advisor		**20**
		90

Remarks: Students should be aware that courses in this program are sequenced. Students must check with their advisors for pre- and co-requisite courses.

Course Descriptions

Definition of Prefixes
SOW—Social Work.

SOW 3113 Dynamics of Human Behavior in the Social Environment I (5)(F,W,S)
An examination of the psychosocial foundations of social work practice, focusing on the analysis of factors affecting human development and functioning in relation to social systems. Prerequisite: PSY 3013, or equivalent.

SOW 3203 Historical and Philosophical Perspectives of Social Welfare Services (5)
This course is a sequential and cumulative examination of social welfare and the changing role of social work. The focus is on creating awareness in the individual in relation to the question, "How do we want to live?"

SOW 3232 Social Welfare Policy and Services I (5)(F,W,S)
This course considers the major social welfare programs in the United States: how they emerged and developed, and how they operate today. Analysis of financial resources, decision-making processes, and structure of delivery systems serves as a basis for understanding policy assessment.

SOW 3302 Introduction to Social Work Philosophy and Practice (5)(F,W,S)
This course presents the student with a didactic and experiential framework as a basis for contemporary social work practice. In this course students will have an opportunity to integrate selected philosophical and ethical concepts of social work practice with structured interpersonal exercises.

SOW 3313 Methods of Social Work Practice I (5)(F,W,S)
An overview of social work intervention for the beginning practitioner. Generic values, attitudes and processes in client-worker relationship-building are discussed and analyzed. Authentic case material is utilized to acquaint students with assessment, modes of interven-

(Continued)

Social Work

tion, goal setting, and implementation. Prerequisites: SOW 3113, SOW 3232, SOW 3302, or their equivalents.

SOW 3350 Techniques of Interviewing (5)
A competency-based course designed to provide students with basic interviewing skills. Emphasis is on acquisition of interview behavior rather than theory. Audio and videotaping, role-playing, simulations, and micro-counseling training methods will be utilized. Prerequisites: SOW 3113 and permission of Instructor.

SOW 3511 Field Experience I (9)(F,W,S,SS)
This is the first 210-clock hour social work practice experience in service to individuals, groups, and/or communities. Placement in an agency or institution is for the purpose of gaining a first-hand awareness of needs and behavioral responses, as well as a knowledge base of expectations, responsibilities, and activities involved in the delivery of social services. This experience facilitates the development of beginning social work skills, and a continually growing awareness of self as a helping person. Majors only. Prerequisites: SOW 3113, SOW 3232, SOW 3313, SOW 3302, SOW 4125, and 4403, or their equivalents. Corequisites: SOW 3522 and SOW 4322.

SOW 3522 Integrative Field Seminar I (1)(F,W,S,SS)
This course is one-hour seminar, to be taken concurrently with SOW 3511 and SOW 4322, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 3113, SOW 3232, SOW 3313, SOW 3302, SOW 4125, and 4403, or their equivalents. Corequisites: SOW 3511 and SOW 4322.

SOW 3703 Self-Awareness, Self-Modification, and Service (5)
An experience oriented course directed toward helping students become aware of their own intrapersonal and interpersonal processes and how these may influence their skill and effectiveness as professional helping persons. Emphasis is on personal learning.

SOW 3949 Co-Operative Education—Social Work I (5)(F,W,S,SS)
A special program permitting social work majors to work in social agencies during alternate quarters, up to a maximum of two quarters. Written reports and supervisory evaluations will be required. This experience may not be substituted for SOW 3511 or SOW 4512. Prerequisites: Three social work courses and permission of Chairperson.

SOW 4125 Dynamics of Human Behavior in the Social Environment II (5)(F,W,S)
Within the framework of the life cycle, the content of this course focuses on the study of selected client systems frequently encountered by social work practitioners. Emphasis is placed on UNDERSTANDING bio-psycho-socio-cultural factors contributing to problems. Prerequisite: SOW 3113 or its equivalent.

SOW 4193 The Systems Approach in the Social Services (5)
This course will focus on general systems theory and its consequences for a revision of the world picture. Emphasis will be on the significance of the systems approach in models elaborated for social service systems. Prerequisite: Permission of Instructor.

SOW 4233 Social Welfare Policy and Services II (5)(F,W,S)
This course considers characteristics and processes common to organizations within the social service system, and the impact of policy decisions on individuals and groups. A systems approach will be used as a basis for understanding strategies for innovation and change. Prerequisites: SOW 3232, SOW 3511, and SOW 3522.

SOW 4242 Child Welfare (5)(F,S)
This course deals with legal principles upon which the child welfare system has been built; and the policies and issues that arise in planning services for children in their own homes—homemaker service, day care, and protective services—and in various types of substitute care—foster or adoptive homes and institutions. Prerequisites: SOW 3113 and SOW 3232, or their equivalents.

SOW 4322 Methods of Social Work Practice II (5)(F,W,S,SS)
This generic skills course is designed to provide students with the theories and techniques of social work practice as applied to small groups. Prerequisites: SOW 3313 and SOW 4125 or their equivalents. Corequisites: SOW 3511 and 3522.

SOW 4332 Methods of Social Work Practice III (5)(F,W,S,SS)
Provides an understanding of planned change at the community level from a social work perspective, as well as strategies and methods utilized in community organization practice. Identification of generalist skills and prevalent models of community organization in social work practice. Prerequisites: SOW 3511, SOW 3522, SOW 4322. Corequisites: SOW 4512 and 4523.

SOW 4403 Methods of Community Research (5)(F,W,S)
Introduction to basic skills of research for beginning social work practitioners: background searching, definition of variables, sampling, analysis of data, data depiction, and report writing. This course is also designed to enable social work students to read research articles more critically, understand reports of results, and evaluate evidence for hypotheses. Prerequisites: SOW 3113 and SOW 3232.

SOW 4512 Field Experience II (9)(F,W,S,SS)
This second 210-clock hour supervised social work practice experience enables the student to progress toward a higher level of awareness and understanding of needs and behavioral responses. Generic skills are applied more selectively with increasing interest and proficiency in one or more practice areas. This second placement affords the student an opportunity to become a more effective part of the social service delivery system. Majors only. Prerequisites: SOW 3511, SOW 3522, and SOW 4322. Corequisites: SOW 4332 and SOW 4523.

SOW 4514 Field Experience III (5 or 10)(F,W,S,SS)
This third supervised social work practice experience makes it possible for students to sharpen diagnostic skills and to refine planning and implementation of appropriate helping techniques as these relate to individuals, groups, and/or communities. Majors only. Prerequisites: SOW 4512, SOW 4332, and SOW 4523, or their equivalents.

SOW 4523 Integrative Field Seminar II (1)(F,W,S,SS)
This course is a one-hour seminar to be taken concurrently with SOW 4512, designed to analyze the field experience and integrate theory and practice. It provides an arena for students from various settings to come together in order to provide a richer understanding of social services on all levels. Majors only. Prerequisites: SOW 3511, SOW 3522, and SOW 4322, or their equivalents. Corequisites: SOW 4332 and SOW 4512.

SOW 4621 Crises in the Lives of Women (5)
Introduction to special experiences in the lives of women which might lead women to seek supportive counseling or other professional assistance. Topics include rape, abortion, sex discrimination, menopause, childbirth.

SOW 4905 Individual Study (1–10)
Individually selected program of supervised personal study related to specific social issues. Prerequisite: Permission of instructor.

(Continued)

Social Work

SOW 4675 Social Work Philosophy and Values (5)
This course is designed to investigate philosophical and social thought in order to explore concepts of social welfare and to assist students in the identification and clarification of values inherent in the social work profession. Prerequisites: SOW 4512, SOW 4523, and SOW 4332.

SOW 4949 Co-Operative Education—Social Work II (5)(F,W,S,SS)
A continuation of SOW 3949. Prerequisites: SOW 3949 and permission of Chairperson.

SOW 5217 Seminar in Social Work (5)
An exploration of various critical issues of concern to the social work profession. Prerequisite: Permission of instructor.

SOW 5272 Social Welfare: Cross-Culture Comparisons (5)
A seminar in which students will analyze and compare social welfare policy, problems, and programs in various countries. This course is designed for seniors and graduate students. Prerequisites: SOW 3232 and SOW 4233, or permission of the instructor.

SOW 5280 Legal Issues in Social Work Practice (5)
This course will introduce the student to important legal aspects of social welfare policy, of social services, and of client rights. It should enable the social worker to provide knowledgeable referrals to legal services and interact effectively with courts and legal counsel. Prerequisite: Permission of Instructor.

SOW 5351 Intervention Strategies in Marriage and the Family (5)
This advanced practice course will help the student understand and apply various means of intervention with the problem family. Emphasis will be placed on the marital partners as the core subsystem of the family. Attention will be given to various family therapy theorists. Prerequisite: Permission of the instructor.

SOW 5354 Techniques for Prevention and Early Intervention (5)
This course has been designed to enable the student to learn about crisis intervention etiology, structure and theory so he/she may acquire some beginning practical knowledge in a subspecialty. This course is designed for seniors and graduate students. Prerequisites: SOW 3313 and SOW 4332, or permission of instructor.

SOW 5435 Evaluating Social Service Programs I (5)
Introduction to experimental and quasi-experimental designs and measurement techniques suitable for evaluation of social service programs. Field experience in defining agency or program goals objectively and designing an actual program evaluation are provided. This course is designed for seniors and graduate students. Prerequisite: SOW 4403 or equivalent.

SOW 5436 Evaluating Social Service Programs II (5)
Implementation of program evaluation proposal generated in SOW 5435. This seminar will provide actual field experience in data collection, analysis, and program evaluation report writing. Prerequisite: SOW 5435.

SOW 5643 Understanding the Process of Aging (5)
This course is designed to develop an understanding of the multiple psychosocial problems experienced by the aging person, and the impact of such on the older person's physical and emotional well-being. Such an understanding will facilitate the helping person's ability to evaluate and intervene with behavior responses exhibited by the elderly. Prerequisite: Senior or graduate standing.

SOW 5684 Professional Values in the Human Services (5)
This course is designed to assist students in identification, exploration, and experiencing the values inherent in professionalism, as they are manifested in the various human service professions. Material will be presented in a didactic and experiential manner with a heavy emphasis upon student involvement in the value clarification process. Prerequisite: Senior or graduate standing.

SOW 5914 Independent Research (1–10)
Individually selected program of supervised data collection and analysis. Prerequisite: SOW 4403 or permission of instructor.

Florida International University
NE 151st Street & Biscayne Blvd.
North Miami, Florida 33181

School of Public Affairs and Services

Dean	**Adam W. Herbert**
Chairpersons:	
Criminal Justice	**Robert E. Snow**
Health Services Administration	**Thomas M. Dunaye**
Public Administration	**J. Arthur Heise**
Social Work	**L. Yvonne Bacarisse**

Faculty

Bacarisse, L. Yvonne, M.S.W., A.C.S.W. (*Tulane University*), *Associate Professor and Chairperson, Social Work*

Berger, Raymond, Ph.D. (*University of Wisconsin at Madison*), *Assistant Professor, Social Work*

Caro, Denis H. J., Ph.D. (*University of Minnesota*), *Assistant Professor, Health Services Administration*

Clark, Harcourt I., M.P.A. (*Florida International University*), *Assistant Professor, Criminal Justice*

Clark, Robert S., Ph.D. (*New York University*), *Professor, Criminal Justice*

Dunaye, Thomas M., Dr.P.H. (*U.C.L.A.*), *Professor and Chairperson, Health Services Administration*

Eichenbaum, Esther, M.S.W., A.C.S.W. (*Columbia University*), *Assistant Professor, Social Work*

Gilbert, G. Ronald, Ph.D. (*University of Southern California*), *Associate Professor, Public Administration*

Hayden, Mary Helen, M.S.W., A.C.S.W. (*Florida State University*), *Assistant Professor, Social Work*

Heise, J. Arthur, Ph.D. (*Syracuse University*), *Associate Professor and Chairperson, Public Administration*

Herbert, Adam W., Ph.D. (*University of Pittsburgh*), *Dean and Professor, School of Public Affairs and Services*

Jones, Rosa L., M.S.W., A.C.S.W. (*Florida State University*), *Associate Professor and Director of Field Instruction, Social Work*

Koppel, Monte H., Ph.D., A.C.S.W. (*New School for Social Research*), *Professor, Social Work*

Kravitz, Sanford L., Ph.D. (*Brandeis University*), *Professor, Social Work*

Lerner, Herbert J., Ph.D. (*New York University*), *Professor, Health Services Administration*

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Marques, Jose A., M.S.W., A.C.S.W. (*Barry College, Miami*) **J.D.** (*University of Havana*), *Associate Professor and Director of Field Internship, Criminal Justice*

Nooe, Julia A., M.S.W., A.C.S.W., C.S.W. (*Tulane University*), *Assistant Dean and Associate Professor, Social Work*

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Patka, Thomas, Ph.D. (*Syracuse University*), *Assistant Professor, Public Administration*

Pendergrass, Virginia E., Ph.D. (*Ohio University*), *Associate Professor, Social Work*

Queralt, Magaly, M.S., Ed.S. (*Barry College*), *Associate Professor, Social Work*

Richie, Nicholas D., Ph.D. (*University of Michigan*), *Associate Professor, Health Services Administration*

Rizzo, Ann-Marie, Ph.D. (*Syracuse University*), *Assistant Professor, Public Administration*

Salas, Luis P., J.D. (*Wake Forest University*), *Assistant Professor, Criminal Justice*

Schneider, Ronald, Ph.D. (*University of Southern California*), *Assistant Professor, Criminal Justice*

Shearn-Perry, Regina B., Ph.D. (*Florida State University*), *Associate Professor, Criminal Justice*

Smith, Betsy A., Ph.D. (*State University of New York at Buffalo*), *Associate Professor, Social Work*

Snow, Robert E., J.D. (*Florida State University*), *Associate Professor, Criminal Justice*

Solomon, Sylviane M., M.B.A., (*University of Miami*), *Assistant Professor, Health Services Administration*

Thomas, Henry B., D.P.A. (*University of Southern California*), *Associate Dean and Assistant Professor, Public Administration*

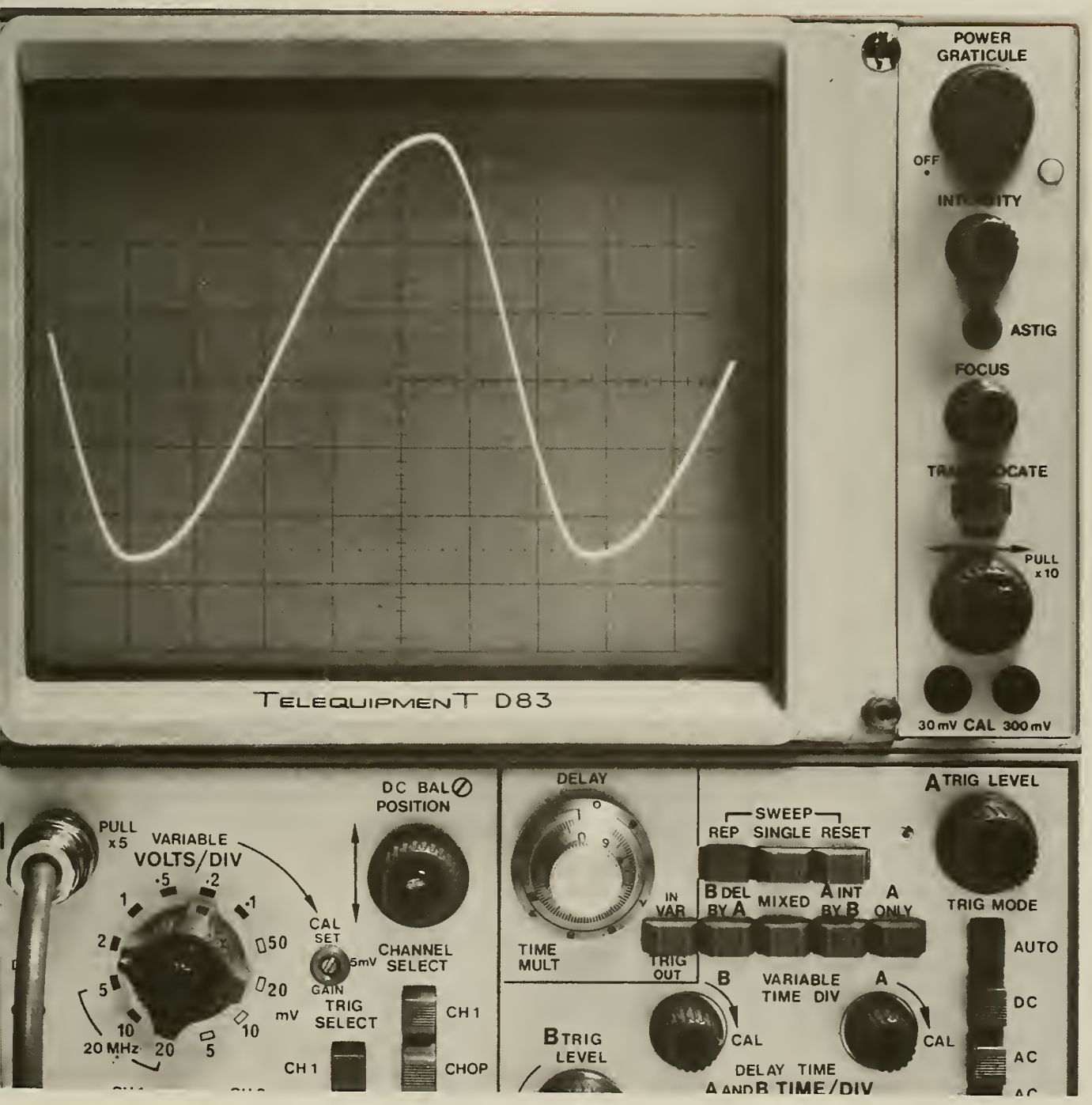
Traxler, Herbert G., Ph.D. (*Florida State University*), *Assistant Professor, Health Services Administration*

Tuckfield, Jack G., Ed.D. (*Florida Atlantic University*), *Assistant Professor, Criminal Justice*

White, Vandon E., Ph.D. (*Purdue University*), *Professor, Health Services Administration*

Wilbanks, William, Ph.D. (*State University of New York*), *Associate Professor, Criminal Justice*

School of Technology



General Information

The School of Technology offers programs leading to the bachelor's degree in ten fundamental technical fields: engineering technology, industrial systems, construction, home economics, communications technology, medical records administration, dietetics and nutrition, medical technology, occupational therapy, and physical therapy. The School of Technology also offers programs of study leading to the graduate degrees of Master of Science in Dietetics and Master of Science in Environmental and Urban Systems. Undergraduate Professional Certificate Programs are available in—Apparel Management, Industrial Safety, Food Technology, Industrial and Labor Relations, Production and Manufacturing, and Heating, Ventilation & Air Conditioning Design.

Programs

The programs of the School are directed toward the practical use of scientific, engineering and technical principles to meet the objectives of industry, business, and the public. Many programs offer an experiential component concurrently with classroom instruction. Clinical affiliations and field placements are available in local community agencies and businesses as well as other locations in Florida and throughout the U.S.

The School provides each student with the opportunity to develop marketable skills and to obtain an education which will prepare him or her for a rewarding career and promote satisfying personal growth.

Underlying the programs of the School is a recognition of the growing impact of technology upon the quality of life and that the proper application of technology is critical to meeting current and emerging needs of man.

The academic programs of the School are provided by its ten programs and are listed below. Most programs have several specified majors as well as a non-structured department major to meet the needs of individuals.

Bachelor's Degrees

The School awards the Bachelor of Science degree (B.S.) to students who complete the prescribed requirements in Engineering Technology (Electrical, Mechanical, Civil, Construction, Environmental and Urban Systems), Construction Management, Architectural Technology, Home Economics, Interior Design, Dietetics and Nutrition, Medical Technology, Occupational Technology, Physical Therapy, Communications Technology, or Medical Records Administration. A student enrolled in Industrial systems may qualify for the Bachelor of Science degree or the Bachelor of Technology (B.T.) degree, depending on the nature of his or her individualized program of study.

General Bachelor's Degree Requirements

In order to obtain a bachelor's degree from the School of Technology, each student must satisfy the following minimum requirements:

1. Obtain a minimum of 180 quarter credits including transfer credits. Some students require more than the minimum program in order to obtain the competencies and objectives of their selected major.
2. Complete at least 45 credits in the School of Technology.
3. Attain a minimum grade-point average of 2.0 on all School of Technology courses. A grade of "D" in any course taught by the School of Technology and listed as a major requirement may not be counted for graduation. Those receiving "D" in such courses must repeat them or obtain a waiver from the advisor to substitute another course.
4. Satisfy the general education requirements for the bachelor's degree by taking those courses at the community college or by a combination of transfer, CLEP and course credits awarded by the University.
5. Satisfy the particular requirements for his or her own major and all University requirements for graduation.
6. Complete an approved *program of study* which must be filed with the advisor by the time the student attains senior status (135 cr.) or at least two quarters prior to application for graduation.
7. Have proficiency in the use of language and mathematics appropriate to his or her program and career objectives.

Cooperative Education

A Cooperative Education (Co-Op) Program is conducted by the School of Technology in conjunction with the Department of Cooperative Education in the Division of Student Affairs. In this program, a student spends alternate quarters in school full-time and fully employed in industry in a technical position directly related to his or her major. Academic credit (normally, 5 credits per quarter) which counts toward the degree is given for the work periods. The student receives full pay for his or her work in industry. Placement in co-op positions is arranged by the Co-op Program and includes both local and national industrial, business and governmental agencies. A Co-op student normally must agree to spend at least three work periods in industry and can normally complete the upper-division program within two calendar years. An applicant for the Co-op Program is evaluated by the School of Technology. An interested student should contact the Assistant Dean. Because of the requirement for three work periods, a student should enter the program during the first quarter of the junior year. Inquiries from lower-division students prior to transfer to the University are particularly encouraged, since work may be arranged immediately upon enrollment.

External Degree

The School participates in the External Degree Program of the University and the External Degree student may enroll in a department major. Because of the technical and laboratory requirements of most programs, the School will consider admission of a student to its External Degree Program only under these conditions:

1. Completion of two years of college, preferably with a technical associate degree.
2. The *inability* to attend the regular program.
3. Substantial work experience, with increasing responsibility, in the technical discipline of the proposed major.
4. A favorable evaluation of the probability of completing the program and the availability of the necessary resources (at this University and at an external site) for the program.

Admissions and Program Planning—Bachelor's Degree Admission Requirements

All bachelor's degree programs of the School are designed to integrate the community college graduate or junior-level transfer student into curricula which have established certain minimum competencies or skills as the requirements for the four-year degree. Consequently, requirements may be met in a variety of ways and through various sequences which are accommodated at the freshman and sophomore level by college parallel (A.A.) and technical (A.S.) programs of the community colleges and by four-year colleges. The School admits to full junior standing a student who meets one of the following requirements:

1. *Associate of Arts* Degree from an accredited community college, or . . .
2. *Associate of Science* Degree from an accredited community college in the technical discipline of their proposed upper level major, or equivalent (the student with a non-technical A.S. degree should consult the Dean's

(Continued)

General Information

Office for assistance and may be admitted to certain programs,) or . . .

3. Junior Level (90 qtr. hr. cr.) in good standing at a four-year college.

Others will be considered as exceptions on an individual basis. A student transferring with the *Associate's* Degree (A.A. or A.S.) is normally awarded 90 transfer credits toward the bachelor's degree. A transfer student from a four-year college may not receive more than 135 credits of transfer toward the bachelor's degree. The transferability of upper-level technical courses is determined by the advisor and is a part of the establishment of the student's program of study.

A student earning the *Associate of Science* Degree should attempt to obtain as many of the general education requirements as possible at the community college, by careful selection of electives. The college parallel student planning to major in Technology should select a pre-professional or pre-science major or should take math, science, and related electives in order to insure rapid progress after transfer.

Program of Studies

The requirements for the various majors in Technology are described in terms of fundamental competencies which may be met through specified courses at the University or demonstrated in other ways. These alternative demonstrations include completion of equivalent courses at other colleges, significant and varied work experiences, and non-traditional learning experiences. Since each student may meet requirements in a unique way, based on his or her individual background and experience, each student is *required* to arrive at a *program of study* which establishes the specific requirements of his or her degree. The program of study must be approved by both the advisor and student and must be completed by the time the student reaches senior standing (135 hours) or at least two quarters prior to application for graduation. A student who does not comply with this requirement may delay his or her graduation.

Department Majors

Some departments offer a non-structured major in addition to its prescribed majors. The student selecting a department major develops an individualized program of study with an advisor which becomes the degree requirement after it has been approved by the School. A department major must satisfy all the graduation requirements of the School and University in a *planned* program. The School assumes no responsibility to apply courses to a department major which are taken prior to formal approval of a program of study. The department major is provided to meet special needs; consequently, most students will be enrolled in the structured majors and the School of Technology does not approve a department major unless special needs exist which it can meet. Some students in Industrial Systems enroll in the department major and receive individualized programs of study. In order to obtain the *Bachelor of Science* degree in a department major, the student must normally complete a program including substantial coursework in mathematics, science and related technology.

Academic Advisors

A student who has been accepted to a degree program in the School of Technology must obtain and consult an advisor *prior* to the first class enrollment. An advisor may be obtained by contacting the Office of the Dean or the Chairperson of the Department in which an academic major is desired. Continued contact (at least once per quarter) with the advisor is urged in order to review progress and register for each succeeding quarter. Such contact is *required* until an approved program of study is completed. Special problems of the student who is undecided about a technology major may be referred to the Assistant Dean.

Credit for Experience

The School will consider awarding credit for experience of three basic types:

A. Compressed courses or training programs such as college seminars, short courses, company seminars, company schools, union apprenticeship schools, and military technical schools.

B. Regular courses taken from technical institutes or other institutions where normal transfer credit is not applicable.

C. Work experience wherein the student gains applicable skills and knowledge.

Such credit may be awarded through examination or evaluation of work products. Evaluation of credit for life experience is, of necessity, a very rigorous process with awards given only for significant experiences that are fully documented and applicable to the student's program. Normally, evaluation is based on equivalency to courses required for graduation and credit is limited to a maximum of 25 quarter hours. A student must be fully accepted to a degree program and must have completed at least two quarters of upper-division work (25 hrs.) prior to evaluation of experience for credit. The student wishing consideration for such credit should discuss it with his or her advisor.

Academic Appeal Procedure

The School endeavors to provide an atmosphere in which the special needs of each student are served. In the event that a student has difficulty in a class or curriculum matter, this should be immediately brought to the attention of the instructor or advisor involved. If resolution is not possible in this way, the student should call the matter to the attention of the responsible department chairperson. If the problem still cannot be resolved, the student may appeal to the Dean of the School by stating the grievance in writing and requesting a review. The Dean may hear an appeal or refer the matter for consideration to an Appeals Committee appointed for that purpose.

Special Features

The School is actively engaged in a number of special programs as a service to the community and the University. One of these activities is a Technical/Vocational Education program in cooperation with the School of Education. The Construction Department hosts the *International Association for Housing Science,* an organization with membership from more than twenty nations, dedicated to improving housing technology and production, as well as studying the inter-disciplinary aspects of housing. The Engineering Technology Department has developed and supports environmental research activities. The School provides numerous special courses and training institutes in cooperation with other university organizations. The technology faculty is actively engaged with business, industry and government seeking the solutions to technical and operational programs. They are participating in a variety of applied research projects in such areas as energy, low-cost housing, transportation, solid waste disposal and water resources.

A Drinking Water Research Center was established within the School in 1976 to conduct research to determine methods for producing high quality drinking water.

Master of Science Degree Programs

The School has two approved Master of Science degrees, Environmental and Urban Systems, and Dietetics. Prospective graduate students should contact the coordinator of the M.S. programs in Engineering Technology or in Dietetics and Nutrition.

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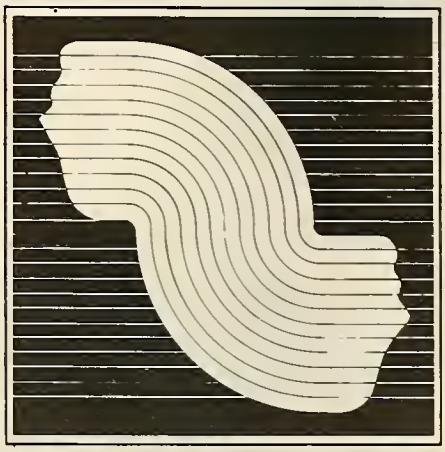
Communications



Admission Requirements

To be eligible for admission to the Master of Science degree programs, the student must meet the general admission standards of the University and of the program to which he/she is applying. University standards are as follows:

1. A bachelor's degree or equivalent from a regionally accredited university or collete.
2. A grade point average of 2.0 on a 3.0 scale, ("B" averate) while registered as an upper division student studying for a bachelor's degree or a combined score of 1000 (quantitative and verbal) on the Graduate Record Examination.

Specific standards of admission for each graduate programs are described in the appropriate sections of this catalogue. For the M.S. in Environmental and Urban Systems, see Engineering Technology. For the M.S. in Dietetics, see Dietetics and Nurtition.

Communications Major

James E. Couch, *Associate Professor and Program Director*
Eric S. Katz, *Assistant Professor*
Fran Assalone, *Visiting Instructor*

The Communications Program offers a wide variety of experiences to students interested in a career in advertising, broadcast production or news, print journalism and public relations. Many courses are taught by professionals from the local communications industry, making FIU's program similar to prestigious ones in other urban centers of the country.

LOCATIONS: Headquartered at the North Miami Campus; courses are also taught at the Tamiami Campus and other sites throughout South Florida.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required Courses: None

Recommended Courses: Applicants should have completed Associate degree requirements or their equivalent and should have fundamental typing skill. Lower division courses in economics, political science, sociology, business and management are suggested.

UPPER DIVISION PROGRAM:

Requirements for Graduation

Core Courses

In addition to the required and elective courses noted for each of the Communications sequences below, the student will be required to complete the 33 quarter hours of the following core:

		Quarter Hours
MMC 4503, 4504, 4505	Media Analysis	2
MMC 3000	Survey of Communications	2
MMC 4602	Role of Mass Media in Society	5
MMC 4200	Communications Law	5
MMC 4302	Comparative Systems of Mass Communications	5
MMC 4945	Communications Internship	10

General communications sequence majors are not required to intern.

Major Sequences

In addition to core courses, the student must successfully complete all required courses in the chosen major sequence. Listed below are the required courses by sequence.

ADVERTISING

		Quarter Hours
JOU 3100	News Reporting	5
*MMC 4609	Public Opinion	5
PUR 4000	Public Relations Principles	5
FIN 3403	Financial Management	5
MAR 3023	Marketing Management	5
MAR 4303	Advertising Management	5
MAR 4344	Advertising Campaign Management	5
		35

BROADCASTING–NEWS

		Quarter Hours
JOU 3100	News Reporting	5
JOU 3109	Interviewing Techniques	5
JOU 4104	Reporting Public Affairs	5
FIL 4202	Television Cinematography	5
RTV 3100	Writing for Electronic Media	5
JOU 3600	Photojournalism	5
RTV 4101	Writing for Electronic Media II	5
RTV 4302	Broadcast News Reporting	5
PUR 4000	Public Relations Principles	5
		45

BROADCAST-TECHNICAL

		Quarter Hours
FIL 4202	Cinematography for TV	5
PUR 4000	Public Relations Principles	5
RTV 3210	Broadcast Production I	5
RTV 3220	Broadcast Production II	5
RTV 4466	Broadcast Production III	5
RTV 4206	Advanced TV Directing	5
RTV 4500	The Broadcast Program	5
		35

PRINT JOURNALISM

		Quarter Hours
JOU 3100	News Reporting	5
JOU 3101	Advanced News Reporting	5
JOU 3200	Editing	5
JOU 3202	Advanced Editing & Graphics Use	5
JOU 3209	Electronic Editing Techniques	5
JOU 3210	Video Display Terminal Practicum	5
JOU 3300	Feature Writing	5
JOU 4104	Reporting Public Affairs	5
JOU 4108	Investigative Reporting	5
PUR 4000	Public Relations Principles	5
		50

PUBLIC RELATIONS

		Quarter Hours
JOU 3100	News Reporting	5
JOU 3200	Editing	5
JOU 3202	Advanced Editing & Graphics Use	5

(Continued)

Communications

JOU 3300	Feature Writing	5
JOU 4307	Industrial Publications	5
*MMC 4609	Public Opinion	5
PUR 4000	Public Relations Principles	5
PUR 4800	Public Relations Campaigns	5
PUR 4934	Public Relations Seminar	5
JOU 3600	Photojournalism	5
		50

GENERAL COMMUNICATIONS

		Quarter Hours
JOU 3100	News Reporting	5
MMC 4503	Media Analysis	2
MMC 4504	Media Analysis	2
MMC 4505	Media Analysis	2
*MMC 4609	Public Opinion	5
PUR 4000	Public Relations Principles	5
JOU 3600	Photojournalism	5
RTV 3210	Broadcast Production I	5
		31

*Under Development

Internships

Internship programs organized with the cooperation of newspapers, radio and television stations, advertising agencies and public relations offices are an integral part of the curriculum. Each student must complete a minimum of ten quarter hours of internship related to the chosen sequence (except General Communications majors). Internships may be arranged by the student but must be approved by the Internship Director before beginning the activity. Students must be capable of productivity from the beginning of their internship periods.

Course Descriptions

Definition of Prefixes
FIL–Film; JOU–Journalism; MMC–Mass Media Communication; PUR–Public Relations; RTV–Radio-Television; VIC–Visual Communication.

FIL 4202 Cinematography For Television (5)
A basic course in handling motion picture equipment and filming assignments for television.

JOU 3100 News Reporting (5)
To teach the skills necessary to recognize and produce a good news or feature story. Experience with actual interviews, discussions with successful writers and journalists, and critique of student work. News judgment and identification of proper sources will be introduced.

JOU 3101 Advanced News Reporting (5)
Practice in reporting news events, personalities and continuing activities. Includes actual experience in writing for news media. Prerequisite: JOU 3100.

JOU 3109 Interviewing Techniques (5)
The interview as a source of information and as a story. Preparing and conducting interviews, including planning of questions, note-taking and transcription, writing and editing. The symposium interview; the press conference; the personality sketch. Prerequisite: JOU 3101

JOU 3200 Editing (5)
Practical skills involved in putting out a newspaper; editing copy for clarity, facts and brevity; headline writing; copy reading and proofreading marks. Prerequisite: JOU 3100

JOU 3202 Advanced Editing and Graphics Use (5)
Study of makeup, layout and design techniques as they pertain to production of magazines, brochures, newsletters and newspapers. Provides an opportunity for individualized projects related to print communications. Prerequisite: JOU 3200 and JOU 3100, or equivalents.

JOU 3209 Electronic Editing Techniques (5)
Study of principles and practical hands-on usage of the Video Display Terminal, and its integral role in print media, especially newspaper production and design. Prerequisite: JOU 3100, JOU3200

JOU 3210 Video Display Terminal Practicum (5)
Provides hands-on experience for the student to do editing exercises via computerized equipment. Prerequisite: JOU 3209 Electronic Editing Techniques.

JOU 3300 Feature Writing (5)
The fact story: researched and written in depth. Planning, construction, writing and marketing non-fiction articles for general and special interest magazines and newspaper feature pages. Includes the query letter; preparing photos and illustrations to accompany the article. Prerequisite: JOU 3100

JOU 3600 Photojournalism (5)
Study of principles and practice of photographic assignments related to coverage of news and feature events; and methods of selecting final photographs from contact prints.

JOU 4004 Perspectives in Mass Media (5)
Evolution of democratic mass media in their social, political, economic, technical and professional aspects, with special attention given to significant trends and personalities. Prerequisite: Senior status or permission of the instructor.

JOU 4104 Reporting of Public Affairs (5)
To teach the student how to cover government activities for newspapers, television, and radio. Aspects of the budget office, county manager's office, and the commissioner's office, courts, and planning and zoning will be outlined. Guest speakers from government offices will appear. Prerequisite: JOU 3101, 3109

JOU 4108 Investigative Reporting (5)
Locating and interpreting basic sources used in reporting and editing news. Students will work with standard reference works and public records, practice interviewing skills, learn to analyze and interpret charts, reports and statistics commonly used by news media and study survey research as used in reporting assignments. Prerequisites: JOU 3100, JOU 3101.

JOU 4302 Editorial & Column Writing (5)
Introduction to persuasive writing as a practical means of influencing public opinion.

JOU 4307 Industrial Publications (5)
Writing, editing and production of materials in the area of trade, business, industrial and technical press with special attention given to style for and production techniques of tabloid and magazine format publications. Prerequisite: Permission of the instructor.

JOU 5806 High School Publication Supervision (5)
Designed to assist teachers of journalism at the high school and junior college level, this course emphasizes the technical aspects of producing student newspapers, yearbooks and magazines, as well as the legal and ethical considerations facing today's adviser. In addition, attention is given to matters pertaining to curriculum and methodology for effective journalistic instruction.

MMC 3000 Survey of Communications (2)
An introduction to the various media of mass communications with special emphasis on newspapers, radio and television; their requirements and opportunities; and their responsibilities to the public.

MMC 4200 Mass Communications Law (5)
Study of laws that regulate U.S. mass media, interpretations of these laws through recent court decisions, and the ways communicators work within the statutes of their nation and state. Prerequisite: Senior Status

(Continued)

Construction

MMC 4302 Comparative Systems of Mass Communication (5)
An examination of various national and international mass communications systems and the elements which determine the type of systems currently operating throughout the world.

MMC 4503, 4504, 4505 Media Analysis (2,2,2)
Study of mass media of the United States and the reasons for the media's coverage of important news activities. An attempt is made to teach students to comprehend better the impact of news events and activities.

MMC 4602 Role of Mass Media in Society (5)
To investigate the role played in the U.S. by the mass communications media as a cultural, social, informational, economic, political and educational force. The interrelationship of all media and their potential impact on the collective population will be studied.

MMC 4905 Independent Study (VAR)
Specialized intensive study in an area of special interest to the student. Consent of faculty instructor is required.

MMC 4936 Special Topics (VAR)
Intensive study for groups of students of a particular topic or limited number of topics, not otherwise offered in the curriculum. Consent of faculty supervisor or divisional chairperson is required.

MMC 4945 Communications Internship (1–10)
On the job learning activity at selected and approved commercial media. Will include newspaper, magazine, radio, television and agency placement. Prerequisite: Consent of adviser.

PUR 4000 Theory and Principles of Public Relations (5)
A course suitable for students of management in all areas of other disciplines, as well as the basic introduction to the theory, history, practice, and future of public relations. A comprehensive study of the field. Prerequisite: MAR 4303, or consent of instructor.

PUR 4800 Planning and Implementation of Public Relations Campaigns (5)
An advanced course in application of theory to actual implementation of public relations activities. Will include practice in preparation of speech ghostwriting, press kits, handling of special events, and complete production on a team basis of a multimedia public relations presentation. Prerequisite: PUR 4000, or consent of instructor.

PUR 4934 Public Relations Seminar (5)
Open to public relations emphasis students only. A course designed to allow the advanced public relations student to pursue a specially selected, specific area of public relations (i.e. political, medical, financial, government, corporate, educational, etc.) through in-depth study under a tutorial style of instruction and guidance. Prerequisite: PUR 4000 and PUR 4800, or consent of instructor.

RTV 3100 Writing for Electronic Media (5)
Practical assignments in the writing of news for radio and television. Will include gathering, processing and final preparation of scripts. Emphasis will be on skills development. A brief study of libel, invasion of privacy, fairness doctrine and equal time will be included. Prerequisite: JOU 3100, JOU 3109, or equivalents.

RTV 3210 Broadcast Production I (5)
Fundamentals of broadcast announcing, presentation and interviewing; audio control room procedures, audio recording and editing, use of music and sound effects.

RTV 3220 Broadcast Production II (5)
Basic television production and direction, audio and video controls, studio cameras, slide and film projection, staging, lighting, graphics and composition. Prerequisite: Broadcast Production I.

RTV 4101 Writing for the Electronic Media (5)
Continuation of RTV 3100, emphasis placed on news gathering and full program script preparation. Prerequisite: RTV 3100, Writing for the Electronic Media.

RTV 4205 Communications Technology Practicum (5)
Practice in communications technology activities learned during attendance in Communications Technology VIC 4300. Implementation of television studio production activities.

RTV 4206 Advanced Television Directing (5)
A study of the work of the television director. Emphasis on the various aesthetic and psychological factors of television production and their creative application in program production and execution. Prerequisites: Broadcast Production I, II and III or permission of instructor.

RTV 4302 Broadcast News Reporting (5)
Reporting, writing, and presenting radio and television news programs; analysis of news and public affairs broadcasting; social responsibility for broadcasters. Prerequisite: RTV 4101. Advanced writing for the Electronic Media.

RTV 4466 Broadcast Production III (5)
Applications of the elements of television production, direction and presentation. Prerequisites: Broadcast Production I and II.

RTV 4500 The Broadcast Program (5)
This course offers the student an understanding of the complex planning and decision-making involved in producing a broadcast package and in developing and maintaining a broadcast program schedule. Prerequisite: Broadcast Production I and Senior Status.

VIC 4300 Communications Technology (5)
This course will provide the study of modern communication equipment usage and impact, with special emphasis upon electronic and visual transmission, reception and projection capabilities and methods. Future development and instrumentation in technical communication systems will also be stressed.

Construction Department

Jack Clark, *Professor and Chairperson*
Iraj Majub, *Professor*
Oktay Ural, *Professor*
Bhaskar Chaudhari, *Associate Professor*
Hedvika Meszaros, *Assistant Professor*
Julio Otazu, *Assistant Professor*
Gerard Pierce, *Associate Professor*
William Bassett, *Visiting Associate Professor*
Jaime Canaves, *Assistant Professor*

The Construction Department of the School is dedicated to a multi-disciplinary approach to the construction industry. By selecting from the fields of engineering, architecture, management, and interior design, its programs develop a system of skills applicable to the complex and interrelated problems of development, construction, and structures. As one of the major factors in our economy, the construction industry also plays a direct role in our quality of life and occupies a position of major concern in the curriculum of the University.

The Construction Department has four specific majors: Architectural Technology, Construction Engineering Technology, Construction Management, and Interior Design.

(Continued)

Construction

Articulation agreements have been made with Broward Community College and Miami Dade Community College (members of the Southeast Florida Educational Consortium) to facilitate the transfer of graduates of appropriate lower division programs to programs at FIU.

Architectural Technology

This program gives the student a multidisciplinary knowledge of the major areas related to the practice of Architecture. Emphasis is on the technical as well as the managerial aspects of the architectural project. These aspects include cost estimating and economic planning; the systematic approaches to building design, design development, preparation of working drawings and specifications; areas of field management and office administration; strength of materials; and theory and design of structures. Furthermore, the student is given the option of concentrating on one or more of the above areas by selecting related electives in consultation with his/her advisor. Articulation agreements have been made with the Department of Building Construction at U.F. and the School of Architecture at FAMU for transfer of graduates of this FIU program to master level studies at these institutions.

LOCATION: Tamiami Campus Only.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: completion of an associate's degree program in architectural technology or pre-architecture; or academic credit or proven competency in the following areas: algebra and trigonometry (or technical mathematics), construction materials, architectural drawings, technical writing, building codes—plus completion of general education requirements.

UPPER DIVISION PROGRAM:

		Quarter Hours
*Major Requirements**		**85**
BCN 3611	Construction Cost Estimating	5
BCN 3762	Codes & Specifications	5
ARC 3586	Building Systems	5
BCN 3703	Management of Construction Projects	5
BCN 3740	Legal Aspects and Construction Labor Law	5
BCN 3402C	Mechanics of Materials	5
ARC 3450	Architectural Innov. for Construction	5
ARC 3484C	Advanced Architectural Drawing and Design I	5
BCN 3761	Specification Writing	5
ARC 3786	Survey of Arch. History	5
ARC 4039C	Architectural Design	5
BCN 4260	Quality Control in Construction	5
ARC 4590C	Structural Design	5
ARC 4485C	Advanced Architectural Drawing and Design II	5
ARC 4270C	Professional Office Practice	5
BCN 4561C	Environmental Control in Buildings	5
ARC 4335C	Site Development	5

*or demonstrated competency

Electives: selected with an advisor to meet degree requirements and program objectives (minimum requirement): **5**

(Minimum) 90

Construction Engineering Technology

This program offers a specialized treatment of the construction process. Emphasis is placed on technical courses in fundamentals of construction, management of personnel and equipment, inspections, mechanical and structural design, construction economy, construction materials, and construction methods.

LOCATION: Tamiami Campus Only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, drawing or drafting, statics.

Remark: A student without this preparation may obtain it while completing the upper division program by taking additional electives.

UPPER DIVISION PROGRAM:

		Quarter Hours
*Major Requirements**		**78**
ETC 3322C	Advanced Surveying	5
BCN 3240	Construction Methods and Equipment	3
BCN 3611	Construction Cost Estimating	5
BCN 3720	Construction Costs and Scheduling	5
BCN 3762	Codes and Specifications	5
ARC 3586	Building Systems	5
BCN 3703	Management of Construction Projects	5
ETG 3530	Strength of Materials	3
ETG 3520L	Materials Testing	2
ETC 3412	Determinate Structural Analysis	3
ETC 3220C	Soil Mechanics and Foundations	5
ETC 3210L	Soil Mechanics Laboratory	2
ARC 4335C	Site Development	5
ARC 4590C	Structural Design	5
ETI 4671	Engineering Economy	5
COP 3112	Introduction to Computers	5
BCN 4561C	Environmental Control in Buildings	5
BCN 4906	Advanced Cost Estimating (sp. topics)	5

*or demonstrated competency

Electives: Selected with an advisor to meet degree requirements and program objectives (minimum required): **12**

(Minimum) 90

Construction Management

This program is designed to develop individuals for management, supervisory or technical positions in the construction industry and related business, and for those who would engage in their own construction-related business activities. Emphasis is on technical and management essentials, such as cost estimating, project field management and operations, methods and equipment, codes and specifications, contract administration, job planning, scheduling, inspections, site development, construction materials, construction economics, cost control, labor relations, and safety.

(Continued)

Construction

LOCATION: Tamiami Campus Only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: academic credit or proven competency in the following areas: algebra and trigonometry, surveying, construction materials, drawing or drafting.

Remark: A student without this preparation may obtain it while completing the upper division program by taking additional electives.

		Quarter Hours
*Major Requirements**		**83**
BCN 3240C	Construction Methods and Equipment	3
BCN 3611	Construction Cost Estimating	5
BCN 3720	Construction Costs and Scheduling	5
BCN 3762	Codes and Specifications	5
BCN 3703	Management of Construction Projects	5
BCN 3640	Economic Planning for Construction	5
BCN 3740	Legal Aspects and Construction Labor Law	5
BCN 3402C	Mechanics of Materials	5
ARC 4270C	Professional Office Practice	5
ARC 4335C	Site Development	5
BCN 4260	Quality Control in Construction	5
BCN 4561C	Environmental Control in Buildings	5
ARC 4590C	Structural Design	5
ETI 4671	Engineering Economy	5
BCN 3730	Construction Safety	5
BCN 4906	Advanced Cost Estimating (sp. topics)	5
BUL 4111	Business Law I	5

*or demonstrated competency

Electives: selected with an advisor to meet degree requirements and program objectives (minimum required): 7

(Minimum) 90

Interior Design

This is an interdisciplinary program integrating areas pertinent to the field of interior environments. It includes considerations in business procedures: commercial residential and institutional design associated with this profession: and development in the ability to integrate design including basic design elements, space relationships, materials, and interior requirements.

LOCATION: Tamiami Campus Only.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: Completion of an Associate's Degree in Interior Design or related area.

UPPER DIVISION PROGRAM:

Major Requirements: With the approval of the advisor, students must complete a minimum of 90 credits selected from the following list:

		Quarter Hours
*Major Requirements**		**80**
ARC 4270	Professional Office Practice	5
IND 4224	Exhibit and Display Design	5
ARC 4039C	Architectural Design	5
IND 4221	Institutional Interiors	5
IND 4316	Media & Methods of Presentation	5
BCN 4561C	Environmental Control in Building	5
IND 3210	Advanced Interior Design I	5
IND 4220	Advanced Interior Design II	5
ARC 3786	Survey of Architectural History	5
IND 3020	Survey of Architectural Int. Design	5
MAR 4503	Consumer Behavior	5
MAR 3023	Marketing Management or Eq.	5
BCN 3611	Construction Cost Estimating	5
BCN 3740	Legal Aspects & Constr. Labor Law	5
IND 4905	Independent Study (Thesis)	5
BCN 3761	Specifications Writing	5

*demonstrated competency

Electives: selected with an advisor to meet degree requirements and program objectives (minimum required): 10

(Minimum) 90

Course Descriptions

Definition of Prefixes

ARC–Architecture; BCN–Building Construction; ETD–Engineering Tech.: Drafting; IND–Interior Design; HHD–Housing & Home Design; LAA–Landscape Architecture.

ARC 3127C Graphic Communication (5)

To develop the understanding and graphic skills necessary to the conception and communication of design and engineering technology. The course is flexible in order to accommodate different student backgrounds. Basic graphic methods and media including orthographic and isometric projection; one and two-point perspective; composition, lettering and presentation techniques.

ARC 3210C Architectural Concepts of Construction (5)

Introduction to principles of design and perception. Study of user's need relationship with environmental and human factors. Examination of architectural design ideas and their development. Prerequisite: ARC 3466, or, equivalent.

ARC 3450 Architectural Innovations for Construction (5)

Specialized study in an area of interest to the student, where architectural design is used with new methods of construction due to advancing technological developments. Drawings and field surveys. Prerequisite: Consent of instructor.

ARC 3466 Materials and Methods of Construction (5)

A study of the types of construction and materials used in buildings. How materials are properly installed and inspected, including the use of special equipment, in accordance to specifications, codes, standards, and agencies recommendations.

(Continued)

Construction

ARC 3484C Advanced Architectural Drawing and Design I (5)
Methodology of planning and design of architectural projects, with special emphasis on working drawings and detail drawings. Prerequisite: ARC 3127C or equivalent.

ARC 3586 Building Systems (5)
Introduction to the problems related to the production of mass housing and applications of "industrialization" to the process of building. Systematic analysis and evaluation techniques of modular construction. Prerequisite: ARC 3466, or equivalent.

ARC 3786 Survey of Architectural History (5)
Comprehensive study of architectural forms, styles and construction techniques throughout history. Prerequisite: ARC 3466, or equivalent.

ARC 4039C Architectural Design (5)
Integrated study of basic design concepts and principles of design. Development of architectural design products, presentation drawings, plans and quantity surveys. Prerequisite: ARC 3127C, or equivalent.

ARC 4270C Professional Office Practice (5)
Assignments in office administration, negotiation of contracts, fee structure, client and public relations. Business organization, procedure scheduling and task allocation within an architectural office. Prerequisite: BCN 3740, or equivalent.

ARC 4335C Site Development (5)
Fundamentals of site planning: physical, economic, social and governmental constraints affecting development zoning; land use controls; subdivision layout; modular design; site characteristics (soil, geology, topography); drainage; access. Design and construction techniques. Prerequisite: Consent of instructor.

ARC 4336 Basic Utilities and Housing (3)
The study of the importance of basic utilities (such as roads, sewer and water supply systems) in housing planning and construction. A relative cost analysis. Health problems and sociological effects of lack of basic utilities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Consent of instructor.

ARC 4354C Construction and Design of Natural Recreation Areas (5)
The course includes design factors, construction requirements, and techniques in developing outdoor recreation facilities. Soil, structure, drainage, irrigation, grass choices, and landscaping materials are covered. Construction of unique natural recreation areas is stressed and related to maintenance costs in the establishment of good facility management. Prerequisite: None.

ARC 4485C Advanced Architectural Drawing and Design II (5)
New techniques in the preparation of working drawings, detail drawings; inclusion of change orders. Preparation of finish schedules, with correlation to specifications writing. Prerequisite: ARC 3484C.

ARC 4590C Structural Design (5)
Elements of structural design in steel, reinforced concrete, and timber, with design specifications per AISC, ACI and NDS. Introduction to prestressed concrete design. Loadings and structural elements commonly encountered in construction will be used for analysis and design. Prerequisite: BCN 3402C, or equivalent.

ARC 5916 Innovations in Building Technology (3)
Experimental approach to new materials and methods applicable to the field of construction. Prerequisite: consent of instructor.

BCN 3210C Construction Materials (5)
Lecture/Lab–A study of the origins, production and uses of construction materials, such as concrete, steel, aluminum, wood, plastics, brick and stone. Includes testing lab, which consists of testing and evaluating properties of construction materials.

BCN 3240 Construction Methods and Equipment (3)
Methods, procedures, and equipment used in residential, commercial and heavy construction. Equipping the construction plant. Production value analysis. Work effectiveness studies. Prerequisite: Algebra.

BCN 3254C Building Construction Drawing I (4)
An introductory course in basic drafting and reading drawings. Use of instruments, orthographic projection, lettering, sectional and auxiliary projections and applied engineering geometry are studied. Various technical symbols are studied to facilitate reading of structural, architectural and mechanical drawings. Prerequisite: consent of instructor.

BCN 3257C Exterior Design (3)
Exploration and analysis of the relationship of exterior and interior environment. Emphasis on three dimensional design projects, using basic model making and presentations.

BCN 3280C Construction Surveying (5)
Principles and practices of surveying as it applies to building construction. Prerequisite: Trigonometry or equivalent.

BCN 3402C Mechanics of Materials (5)
Applications of the principles of mechanics to engineering problems of equilibrium, strength, and stiffness. Topics include equilibrium of forces, stress, strain, torsion, beams, and columns. Prerequisite: Trigonometry or Technical Math.

BCN 3611 Construction Cost Estimating (5)
Principles and practices of estimating providing application and drill in surveying quantities of labor and materials for general construction projects: excavation, concrete and formwork, carpentry, masonry, structural steel, lath and plaster, interior finishes. Prerequisite: ARC 3466 or equivalent. Consent of instructor.

BCN 3640 Economic Planning for Construction (5)
Nature of construction costs, funding sources and arrangements, capital requirements, bonding, insurance, risk and contingency evaluation, general office operations, and bidding procedures. Prerequisite: BCN 3703, or equivalent.

BCN 3703 Management of Construction Projects (5)
Organization and management theory elements of leadership and human supervision, organization, office operations, labor relations, safety, and work improvement, as they relate to project field operations. Prerequisite: BCN 3720 and BCN 3762, or equivalent.

BCN 3706 Interdisciplinary Aspects of Housing (3)
Recognition and definition of all factors which affect the planning, financing, and construction of housing projects. The operations and responsibilities of a multidisciplinary team dealing with the decision process. Prerequisite: consent of instructor.

(Continued)

Construction

BCN 3720 Construction Costs and Scheduling (5)
The application of the Critical Path Method and Program Evaluation Review Technique to construction planning, scheduled vs actual job expenditures. Cost forecasting. Development of unit prices from field data. Laboratory is included, which consists of computer applications. Prerequisite: BCN 3611, or equivalent.

BCN 3740 Legal Aspects & Construction Labor Law (5)
Legal and business aspects of engineering contracts and specifications in the construction industry. Analysis, study of precedents, and application of contract clauses, including changes, changed conditions, termination, disputes, payments, risk and insurance, inspection, liquidated damages, and technical requirements. Prerequisite: BCN 3762.

BCN 3761 Specifications Writing (5)
Study of methodology for acquisition of information and transmission of technical and legal requirements for construction projects. Preparation of outline specifications, building description and purchasing specifications. Problems of format, reviewing and updating. Prerequisite: BCN 3740 or consent of instructor.

BCN 3762 Codes and Specifications (5)
A study of codes required by local, county, and state levels. The writing and reading of specifications: bidding procedures; the relationships between contractors, engineers-architects, owners, subcontractors, and material suppliers. Prerequisite: ARC 3466, or equivalent.

BCN 4221 Road Construction (5)
A study of highway planning pre-construction investigations such as surveys, soil test data and drainings, types of construction equipment and materials. Familiarization with standard methods required for various governmental agencies. Prerequisite: BCN 3210C.

BCN 4260 Quality Control in Construction (5)
Quality control as governed by the job inspector, contractor superintendent, architect-engineer, building official, and governmental agencies and requirements. Prerequisite: BCN 3762, or equivalent.

BCN 4452 Structural Systems (5)
A general study of the methods of structural systems, such as beams, columns, rigid frames, arches, trusses, floors, enclosure systems, and various foundation configurations. The limitations of using various structural materials for the systems will be discussed. Prerequisite: BCN 3402C, or equivalent.

BCN 4473 Systems Approach for Housing Planning (3)
Discussions of basic concepts of systems analysis and systems approach to the field of housing planning. The advantage of systems approach. Case studies. Prerequisite: BCN 3706, or equivalent.

BCN 4561C Environmental Control in Buildings (5)
A study of concepts and systems for providing optimum thermal, lighting, plumbing, and acoustical conditions, in both commercial and residential buildings. Designed for majors in architecture, interior design, and construction management. Prerequisite: ARC 3466, or equivalent.

BCN 4707 Housing and Environment (3)
The impact of housing and construction on a community and environment. The necessity of total planning to protect the environment. Public participation in housing planning. Economics vs. ecology. Prerequisite: none.

BCN 4905 Directed Independent Studies (1–5)
Specialized intensive study in an area of special interest to the student. Prerequisite: consent of instructor.

BCN 4906 Special Topics (1–5)
For a group of students who wish an intensive study of a topic not otherwise offered in the University. Prerequisite: consent of instructor.

BCN 5022 Housing for Developing Countries (3)
Problems faced by developing countries in housing their population. Political, economic, social and technical considerations in decision process. Prerequisite: ARC 3586 or BCN 3706.

ETD 3020 Graphic Communication (5)
Principles of bi-dimensional design, drafting techniques. Perspective and isometric drawing and introduction to architectural drawings. Prerequisite: consent of instructor.

HHD 3151 Housing: Shelter and the Consumer (5)
Development of shelter and its effect on the family, community, towns, cities, etc. House planning and financing from the economic, social, scientific and aesthetic point of view. Prerequisite: none.

IND 3020 Survey of Architectural Interior Design (5)
Application of the elements, principles and introduction to the basic facets of architectural interiors and its relationship to interior environment in general.

IND 3210 Advanced Interior Design I (5)
Consideration and application of design criteria including floor, wall and ceiling materials and treatments, furniture selection and arrangement, illumination, ventilation and selected architectural details for residential spaces. Prerequisite: Junior standing.

IND 3500 Interior Design (5)
Integrated study of materials and business practices used in interior design. Emphasis on blueprint reading, technical terms, business procedures, estimates and quotations. Prerequisite: none.

IND 4220 Advanced Interior Design II (5)
Analysis, synthesis, articulation and design execution of commercial spaces, integrating human factors, environmental-technological systems, activity structure and symbiotic relationships as space design determinates. Consideration of significant aspects of culture design components, and merchandising procedures. Prerequisite: IND 3210.

IND 4316 Media & Methods of Presentations (5)
Applications of media and materials used in presentation of design concepts and programs to clients, groups and organizations. Emphasis on various equipment and graphic techniques available, their application and use in simple and detailed communications. Prerequisite: none.

IND 4221 Institution and Industrial Interiors (5)
Analysis and synthesis of institutional functions, administrative controls, resources, constraints and policies in planning economic, behavioral and environmental parameters. Selections and design of selected furnishings and components. Prerequisite: IND 3500.

IND 4224 Exhibit and Display Design (5)
Articulation and analysis of exhibit and display planning and design, integrating purpose, perceptual and effectiveness into the design process: emphasis on the coordination of materials, graphic design, color and illumination. Prerequisite: none.

IND 4905 Independent Study (Thesis) (3–5)
Simulated conditions of an interior design commission assuming all responsibilities of a professional interior designer, providing all required services including: cost estimate, contract, conceptual design drawings, selection of furniture and accessories, lighting systems, and treatment of walls, floors and ceilings. Prerequisite: Completion of Interior Design curriculum.

(Continued)

Dietetics and Nutrition

LAA 3370C Landscape Design I (5)
Application of Basic Design principles to the design of landscape and garden. A general survey of design elements, restraints, plant materials and other garden materials will aid the student to develop projects in a laboratory environment. Prerequisite: ARC 3127C

LAA 3787 History of Landscape (5)
A survey of landscape history throughout the ages. From the gardens of Mesopotamia, Roman and Islamic periods, the Monastery and Castle gardens of middle ages and the Renaissance, to the influence of Oriental gardens and the modern era. Prerequisite: Consent of instructor.

Dietetics and Nutrition

Penelope Easton, *Professor and Chairman*

Susan Himburg, *Assistant Professor and Director, CUPID*
Katharine Curry, *Associate Professor*
Rasheed Khan, *Assistant Professor*
Susan Myers, *Assistant Professor*

The Department offers a major leading to a baccalaureate degree with a concentration in general dietetics, and courses in nutrition for allied disciplines or for the student who desires a working knowledge of nutrition. The Department also offers a *Master of Science* degree program in dietetics with areas of concentration in therapeutic and community dietetics or dietetic management. The undergraduate programs are designed to assist the student to gain basic practitioner understanding and skills, and to achieve his or her career objectives. The graduate program prepares the student to assume leadership responsibilities in health care institutions, community health agencies, or private practice. The graduate program allows for concentration in research or field application.

Undergraduate Programs

The coordinated undergraduate program meets the requirements of the American Dietetic Association, both for academic preparation for membership and for clinical experience.

The Florida International student must make formal application to the Department for the clinical portion of the program by April 15 of the spring quarter before fall admissions. Clinical courses are sequential and require two years to complete. Clinical experiences are available in several hospitals and other health agencies. A graduate of the clinical portion of the program is eligible to take the examination to become a registered dietitian.

A graduate of the above program is awarded a Bachelor of Science degree. With special planning and advisement, a program of study leading to the Bachelor of Science degree in dietetics and nutrition without clinical experience may be arranged.

General Dietetics

LOCATION: Tamiami Campus only.

DEGREE: *Bachelor of Science in Dietetics and Nutrition*

LOWER DIVISION PREPARATION:
The student desiring to major in general dietetics should have completed the following: (1) general education requirements (if not included in the lower division general education coursework, at least one course each in psychology, sociology, economics, two courses in English composition or technical writing); (2) two courses in inorganic chemistry with labs; (3) one course in organic chemistry with lab; (4) one course in business management; (5) one course in basic foods; (6) one course in basic nutrition; (7) Microbiology; and (8) one course in quantity food preparation.

UPPER DIVISION PROGRAM:

		Quarter Hours
Major Required Courses:		**88**

NOTE: Courses designated below with an asterisk(*) comprise the clinical component, and *must* be taken in the order listed. Clinical experiences are supervised by the course instructors. Clinical stations are located in appropriate hospitals, health agencies and school food service programs. Courses marked with an asterisk (*) are open only to students in the coordinated clinical program. Applied courses and practicum must be taken concurrently with the related didactic courses.

DIE 3005	Orientation to Dietetics*–	3
	–(Organic Chemistry must be completed before DIE 3005 is taken)	
HUN 4410	Nutrition: Infancy Through Adolescence	5
FSS 3215	Meal Management	5
DIE 3317	Dietetics in Community Health*	8
DIE 3245	Diet Therapy I	4
DIE 3275	Applied Diet Therapy*	6
DIE 3125	Management of Dietary Systems	4
DIE 3175	Management of Dietary Systems Practicum*	7
DIE 4246	Diet Therapy II	5
DIE 4435	Dietetic Instruction and Counseling	4
DIE 4436	Dietetic Instruction and Counseling Lab	1
DIE 4365	Dietetic Management of Nutrition Programs (Advanced)	4
DIE 4377	(Applied) Dietetic Management of Nutrition Programs (Practicum)*	8
HUN 4241	Nutrition II	4
FOS 4041	Food Science	5
DIE 4536	Advanced Clinical Practicum in Dietetics*	12
DIE 4506	Seminar in Dietetics and Nutrition*	3

Other Requirements: One course in biochemistry; one course in human physiology; plus any lower division requirements not completed.
Recommended Electives: Selected courses in the following areas; education, statistics, social work, health science, adult education, business, anthropology, sociology. **(3–5)**

Graduate Program

The Department of dietetics and nutrition offers a graduate program leading to the Master of Science degree in Dietetics, with a subspecialty in either Therapeutic and Community Dietetics or Dietetic Management. Dietitians enrolled in this Program may prepare themselves for positions of responsibility in health care institutions, community health agencies, or private practice. The Program will allow for concentration in research or field application.

The Program is designed to meet the needs of the professional practitioner of dietetics. It is keyed to the study of the rapidly growing urban society of South Florida with its multi-cultural groups.

(Continued)

Dietetics Nutrition

Admission to the Program will be determined by an evaluation of the bachelor's program. Undergraduate preparation will include a Bachelor of Science in Dietetics or Food and Nutrition and/or the minimum requirements, leading to membership in The American Dietetic Association. Minimum requirements, under current Board of Regents policy, will be met. This includes a combined score of 1000 on the Verbal and Quantitative Aptitude Tests of the Graduate Record Examination or at least a "B" (3.0 on a 4 point scale) average in all upper level division work. Application procedure for admission to the program will be found in the discussion of University procedure for admission to graduate study in the current FIU catalog. A personal interview or suitable letters of reference will be required for admission.

Students who apply for admission without a Bachelor of Science degree in Dietetics will meet ADA Plan IV requirements. All students must contact the Department simultaneously with graduate admission application to the University.

Students who are candidates for the Master of Science degree in Dietetics must complete a minimum of 45 quarter hours of graduate study and 33 hours of this work must be completed at Florida International University. All of the work must be of recent enough date to be relevant to the field of dietetics today.

The student's program will be planned to be consistent with his/her career goals and in consultation with his/her assigned faculty advisor. The proposed program of study will be filed in the office of the Chairman of the Department of Dietetics and Nutrition by the end of the student's first quarter of full-time study.

Retention in the Master of Science in Dietetics Program required maintenance of a "B" grade point average.

Prerequisites for students with a bachelor's degree other than in Dietetics:

The prerequisites below should be completed before admission to the Department of Dietetics and Nutrition Graduate Program. Under special circumstances, a student may be given special permission by the Department Chairman to take a limited number of these courses simultaneously with the Graduate Program.

Therapeutic and Community Dietetics Subspecialty

Course Name

Basic Nutrition (1)
Advanced Nutrition (1)
Basic Foods (1)
Meal Management or Foods (1)
Food Science (1)
Quantity Food Preparation (1)
Diet Therapy (1)
General Chemistry with Laboratory (1)
Organic Chemistry with Laboratory (1)
Biochemistry, junior level or above (1)
Physiology (1)
Microbiology or Bacteriology (1)
Management and Education courses

Dietetic Management Subspecialty Candidates must have completed the following if they do not meet the requirements above:

Advanced/Quantity Food Production
Accounting
Equipment and Layout
Management courses accepted in lieu of Biochemistry

Courses in General Education required for all students, including:

Anthropology, Economics, Psychology and/or Sociology, English, Mathematics and Statistics.

Therapeutic and Community Dietetics

LOCATION: Tamiami and North Miami Campuses.

DEGREE: *Master of Science in Dietetics*

A candidate for the master's degree in Therapeutic and Community Dietetics must complete the following courses:

		Quarter Hours
DIE 5247	Diet in Disease Prevention and Treatment	4
DIE 6937	Graduate Seminar in Dietetics	1
DIE 6568	Research Methods in Dietetics	5
HUN 6811	Laboratory Research Methods in Dietetics	
or		
DIE 6578	Field Research Methods in Dietetics	3
DIE 6908	Supervised Field Study in Dietetics	
or		
DIE 6971	Thesis in Dietetics	5
HUN 5245	Nutrition and Biochemistry	
or		
HUN 6247	Nutritional Pathophysiology	4
HUN 6408	Nutrition During the Life Cycle	
or		
FOS 6044	Advanced Food Science	
or		
HUN 6521	Advanced Community Nutrition	4
Other DIN Program Courses		8–10
Courses outside the DIN Program		12–14
		45

Dietetic Management

LOCATION: Tamiami and North Miami Campuses.

DEGREE: *Master of Science in Dietetics*

		Quarter Hours
DIE 6937	Graduate Seminar in Dietetics	1
DIE 6568	Research Methods in Dietetics	5
HUN 6811	Laboratory Research Methods in Dietetics	
or		
DIE 6578	Field Research Methods in Dietetics	3
DIE 6908	Supervised Field Study in Dietetics	
or		
DIE 6971	Thesis in Dietetics	5
FOS 6044	Advanced Food Science	4
DIE 6128	Advanced Management of Dietary Systems	4
Other DIN Courses		12–14
Courses outside the DIN Program		12–14
		45

Course Descriptions

Definition of Prefixes

DIE–Dietetics; FOS–Food Science; FSS–Food Service Systems; HUN–Human Nutrition.

Undergraduate

DIE 3005 Orientation to Dietetics (3)
Survey of role and responsibilities of dietitian. Legal and ethical considerations necessary for the student dietitian in clinical experiences. Educational and personal qualifications for specialization in dietetics. Prerequisite: Organic Chemistry or permission of Chairperson.

DIE 3125 Management of Dietary Systems (4)
Survey of various types of institutional food service systems. Will cover management concepts in planning, implementing and evaluating food service systems. Prerequisite: Basic Management, Quantity Food Preparation.

(Continued)

Dietetics and Nutrition

DIE 3175 Mananement of Dietary Systems Practicum (7)
Provides for developing the skills as listed for DIE 3125. Clinical assignments will be made in several food service institutions in this area. Prerequisite: DIE 3275. Corequisite: DIE 3125. Clinical component: open only to a student in the Coordinated Undergraduate Program.

DIE 3245 Diet Therapy I (4)
Techniques of adjusting nutrients and food intake to accomodate medical treatments and previous nutriture. Menu writing and analysis, translation of dietary prescriptions, techniques of dietary instruction, dietary histories. Prerequisites: HUN 3122 or equivalent, HUN 4410, Physiology, Biochemistry, and permission of chairperson. Majors only.

DIE 3275 Applied Diet Therapy (6)
Observation and participation in dietary treatment activities. In clinical institutions, application of menu writing, translation of dietary prescription, techniques of dietary instruction and diet history. Clinical component: open only to a student in the Coordinated Undergraduate Program.

DIE 3317 Dietetics in Community Health (8)
Study of community agencies available for nutrition guidance for differing age groups. Observation and participation in activities of community agencies. Prerequisites: Physiology, HUN 3122, DIE 3005, HUN 4410. Clinical component: open only to a student in the Coordinated Undergraduate Program.

DIE 4195 Special Problems in Dietetic Administration (1–3)
In-depth study of a problem in dietetic administration chosen to coincide with a student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis and technical writing.

DIE 4246 Diet Therapy II (5)
In-depth study of the complex dietetic problems accompanying metabolic disorders with considerations of medical and individual needs. Prerequisites: Biochemistry, Physiology, DIE 3245 or equivalent. Majors only.

DIE 4296 Special Problems in General Dietetics (1–5)
In-depth study of a problem in general dietetics chosen to coincide with student's interest and career goals. Student will develop objectives stated in behavioral terms and demonstrate skills in information gathering, analysis and technical writing.

DIE 4365 Dietetic Management of Nutrition Programs (4)
Advanced concepts of managerial functions of a dietitian working as an institutional consultant, a member of a community nutrition program, a private therapeutic consultant (or) (as well as) full time institutional food service administrator will be covered. Advanced standing required. Prerequisite: DIE 3125 or permission of the instructor, basic competency in management principles.

DIE 4377 Dietetic Management of Nutrition Programs Practicum (8)
Assignments will be made in various community agencies and institutions for development of beginning progressional level competencies in management of nutrition and food service programs. Prerequisite: DIE 3175. Clinical component: open only to a student in the Coordinated Undergraduate Program.

DIE 4435 Dietetic Instruction and Counseling (4)
Motivational methods and instructional techniques will be practiced in simulation activities for development of entry level competencies. Recorders and VTR's will be used for feedback and evaluation. Advanced standing in dietetics required.

DIE 4436 Dietetic Instruction and Counseling Laboratory (1)
Will provide small group video tape recording practice in dietetic instruction and counseling. To be taken with DIE 4435. Prerequisite: Advanced standing in dietetics.

DIE 4506 Seminar in Dietetics and Nutrition (3)
Study of current dietetic and nutrition problems, and research findings. Open to students with senior standing only.

DIE 4536 Advanced Clinical Practicum in Dietetics (12)
In-depth study combining theoretical concepts and clinical experience. Learning experience will be planned cooperatively by the student, campus instructor and clinical instructor to meet individual needs and goals of the student. Prerequisite: DIE 4365 and DIE 4377 and permission of Director of the Coordinated Undergraduate Program. Clinical component: open only to a student in the Coordinated Undergraduate Program.

FOS 3004 Food and the Consumer (4)
Study of concerns of purchasing, storage and preparation of food. Consideration of current life style which influences food choices. Designed to give the student skills in purchasing and preparing foods to meet personal, social and physical needs. Demonstration laboratory included. (Recommended for non-majors.)

FOS 3021 Fundamentals of Food (5)
Study of selection, processing and preparation of food with attention to quality and nutrient retention. Includes equipment choices for food preparation in small quantities. Laboratory included. (Recommended for non-majors.)

FOS 4041 Food Science (5)
Physical and chemical changes in food occurring as a result of various methods of processing, preparation, and storage of foods. Prerequisite: Organic Chemistry, HUN 3122, FOS 3021 and FSS 3215, or equivalents.

FSS 3215 Meal Management and Service (5)
Development of skills in basic techniques of purchasing, preparation and service of food for individuals and small groups. Includes laboratory and experiences in demonstration techniques. Prerequisite or corequisite: HUN 3122 and FOS 3021 or equivalent or permission of instructor, preparation in basic foods.

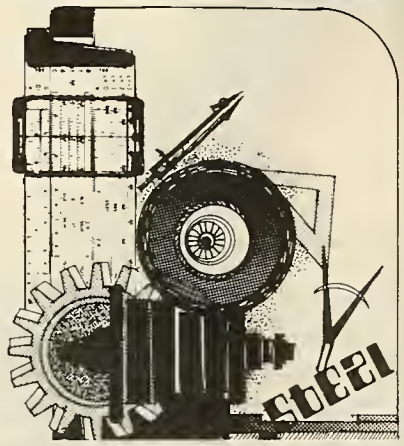
FSS 3316 Food Science for Institutions (4)
Course will emphasize proper food handling in institutional settings with use of sound management principles closely coordinated with food science advances and government regulations. Laboratory and field trips will be used to strengthen theoretical concepts. No prerequisites.

HUN 3122 Nutrition and Culture (5)
Nutrients and their interrelationships in reference to food habits and the needs of various population groups. Introduction to the impact of culture on nutriture and the study of personal food pattern development. (Recommended for non-majors.)

HUN 3240 Metabolic Aspects of Nutritional Status (5)
Course will emphasize the nutritional components of food and metabolic aspects of nutrients. The interaction of nutrients and their complete degradation and utilization to meet the metabolic demands of the body. Prerequisite: 12 quarter hours chemistry and HUN 3122, or equivalent.

(Continued)

Engineering Technology



HUN 4241 Nutrition II (4)
Roles of nutrients in metabolic processes. Effects of excesses and deficiencies. Prerequisite: Organic Chemistry, Physiology and HUN 3122 or equivalent.

HUN 4410 Nutrition: Infancy Through Adolescence (5)
Study of nutrient needs of women of childbearing years and infants and children. Group feeding programs, government agencies, for children and adolescents. Nutrition education materials and strategies in various economic and cultural groups. Prerequisite: HUN 3122.

Graduate

DIE 5247 Diet in Disease Prevention and Treatment (4)(S)
Critical study - historical, current, and experimental. Prerequisite: DIE 3245 or equivalent.

DIE 5926 Workshop in Dietetics and Nutrition (1–5)(SS)
Short term intensive development of selective subject matter in dietetics, nutrition or nutrition education techniques and methods. Prerequisites vary according to subject.

DIE 6128 Advanced Management of Dietary Systems (4)(F)
Emphasis on management and organizational theory. Innovative projects for the development of management competencies are developed to meet needs of individual students. Prerequisite: DIE 3125 or equivalent.

DIE 6568 Research Methods in Dietetics (5)(F)
Consideration of scientific methods and theoretical orientation as applied to research in dietetics. Special consideration given to various techniques of investigation, data collection, data organization and interpretation. Prerequisite: Admission to Master of Science in Dietetics Program and permission of instructor.

DIE 6578 Field Research Methods in Dietetics (3)(W)
Application of field research methods in interpreting and designing research studies. Introduction to interdisciplinary research approaches. Prerequisites: DIE 6568 and consent of department chairman.

DIE 6907 Individual Study in Dietetics (2–5)(ALL)
Intensive individual investigation of a phase of dietetics. Emphasis on recent findings in dietetics and allied disciplines. Prerequisite: Consent of the Chairperson of the department.

DIE 6908 Supervised Field Study in Dietetics (5)(ALL)
Pre-planned practical experience at the professional level in an area of dietetics. Critical written evaluation by the student, developed with frequent consultation and supervision of instructor. Prerequisite: DIE 6578, 30 hours of graduate study and permission of instructor.

DIE 6937 Graduate Seminar in Dietetics (1)(F,W)
An exploration of current issues in the field of dietetics and nutrition. Topics are chosen by the class and instructor(s). Each student has an opportunity to lead the discussion. One hour required of all graduate students. Student may repeat up to 3 hours.

DIE 6971 Thesis in Dietetics (5)(ALL)
Prerequisite: DIE 6578 or HUN 6811, 30 hours of graduate study and permission of thesis committee.

FOS 6044 Advanced Food Science (4)
In-depth study of chemical and physical properties of interactive components of selected foods. Emphasis on effects of additives and methods of preparation and preservation. Includes laboratory. Prerequisite: FOS 4041 or equivalent.

HUN 5123 Ethnic Influences of Nutriture and Food Habits (4)
Systematic study of the food habits of various cultural groups. Emphasis is on methodology, analysis of data, relationship of food habits to nutritional standards and corrective measures. Includes laboratory. Prerequisite: Competency in food preparation and nutrition. Recommended for non-majors.

HUN 5245 Nutrition and Biochemistry (4)
Advanced study of the relationship of nutrition and biochemistry, with emphasis on digestion, absorption and metabolism of carbohydrates, lipids and proteins. Prerequisite: Physiology, Biochemistry and HUN 4241, (Nutrition II.)

HUN 5611 Nutrition Education in the Community (4)
In-depth study of nutrition education information and methods in the community including the nutrition education component of school food service and other congregate meal programs. Prerequisite: Recent courses in nutrition education or permission of instructor.

HUN 5621 Food, Nutrition and Communication (4)
Covers concepts and techniques for effective professional communication with individuals, groups and other professionals. Emphasis is on differences in approach to communication in small groups versus mass media. Prerequisite: Advanced standing, competency in food and nutrition knowledge.

HUN 5890 Recent Research in Dietetics (4)
Updating of dietetic information. Study of current food, management and/or nutrition research. Prerequisite: Competency in foods and nutrition. Recommended for non-majors.

HUN 6247 Nutritional Pathophysiology (4)
Systems of the body in relation to the pathological conditions allied to digestion, absorption, metabolism, and other states in which nutrition plays a part in etiology or treatment. Prerequisite: Physiology, DIE 3245 and HUN 4241.

HUN 6408 Nutrition During the Life Cycle (4)
In-depth study of nutrient needs of individuals and groups at different stages of life. Emphasis on nutrient inter-relationships and effects of deficiencies and excesses on metabolism. Prerequisite: HUN 4241 or equivalent.

HUN 6521 Advanced Community Nutrition (4)
In-depth study of assessment of nutriture in population groups and needs of public for nutrition information. Emphasis on nutrition consultation for health professionals and methods of delivery or dietary care. Prerequisite: DIE 4365 or equivalent.

HUN 6811 Laboratory Research Methods in Dietetics (3)(W)
Laboratory application of research methods in dietetics. Prerequisite: DIE 6568 and consent of department chairman.

Engineering Technology Department

James Story, *Associate Professor and Chairperson*
LeRoy Thompson, *Professor*
Jose Villate, *Associate Professor*
Manuel Cereijo, *Associate Professor*
Wunnava Subbarao, *Associate Professor*
Juan Villar, *Assistant Professor*
Robert Judge, *Assistant Professor*
Rene Leonard, *Associate Professor*
Jimmy Hahs, *Associate Professor*
Sergio Alcorta, *Associate Professor*

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Engineering Technology

The student who wishes to enter a position which emphasizes the practical application of engineering concepts in areas such as manufacturing, production, design, installation, operation, administration, service and sales will be served by the programs of the Engineering Technology Department. Its programs are designed to give each student technical and organizational knowledge which satisfies the needs of industry, business and government in many rewarding technical careers. The graduate of an Engineering Technology bachelor's degree program is a technical problem solver, with the skills and training necessary for independent action as a part of the engineering team.

The objectives of the programs include: proficiency in the use of the scientific method: the capability to analyze problems through calculus: the application of processes, equipment procedures and methods to industrial problems: the knowledge of a field of specialization including the underlying sciences: individual judgment, initiative and resourcefulness: capability of establishing an effective rapport with workmen, scientists, managers and customers: and effective communication skills.

Three majors are offered in the Department of Engineering Technology: Electrical Engineering Technology, Mechanical Engineering Technology, and Civil Engineering Technology.

The Engineers' Council for Professional Development has accredited the Civil Engineering Technology and Electrical Engineering Technology majors.

Electrical Engineering Technology

This program offers specialization in the application of electronic concepts, including circuit analysis and design, communications, power, process control, digital systems and related topics.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: Completion of a community college associate's program in electronics technology, electrical technology, or pre-engineering; or the equivalent at a four-year institution. An entering student with an *Associate of Science* degree in Technology should have completed algebra and trigonometry, physics, DC and AC circuits, transistor theory and circuits, semi-conductor devices and digital circuits prior to transfer. Pre-Engineering (Associate of Arts) or other transfer students should have completed mathematics through calculus, physics (with calculus) and other sciences at the lower division. The student whose background does not include all of these skills (in *either* Technology or pre-Engineering) may be admitted with deficiencies which must be made up while enrolled at Florida International.

UPPER DIVISION PROGRAM:

		Quarter Hours
Core Courses (AA in Pre-Engineering)		**20**
ETE 3034C	Introduction to Circuit Analysis	5
ETE 3035	Elec Cir. Lab & Comp.	3
ETE 3101	Introduction to Electronics	5
ETE 3030L	Electronics Lab	2
ETE 3142	Solid State Devices	5
Core Courses (AS in Electronic Technology)		**20**
MAC 3411	Calculus I	5
MAC 3412	Calculus II	5
PHY 3040C	Physics	5
PHY 3041C	Physics	5
Common Core Courses		**70**
ETE 3620C	Logic Design	5
COP 3112	Introduction to Computers I	5
ETE 3121C	Advanced Circuit Analysis	5
ETE 3565C	Introduction to Electrical Power	5
ETE 3323C	Practical Linear Systems Analysis	5
ETE 3421C	Modern Communication Technology	5
ETE 4123C	Electronic Circuit Analysis	5
ETE 4161C	Integrated Circuits Analysis & Application	5
MAN 3504	Industrial Operations	5
ETI 4671	Engineering Economy	5
Advised Elective		5
Specialization		15
Minimum Upper Division Required Hours		**90**

Specialization: of the following areas:

Digital Systems

ETE 3661C	Advanced Computer Systems	5
ETE 4621C	Advanced Logic Design	5
ETE 4669	Microprocessors	5

Electrical Power

ETE 3526C	Electric Machinery	5
ETE 4565C	Electrical Power Systems I	5
ETE 4567C	Electrical Power Systems II	5

Electronic Communications

ETE 3422	Transmission Systems for Communication	5
ETE 4426C	Advanced Communication Systems	5
ETE 4170C	Passive and Active Filters	5

Process Control

ETE 4324C	Process Control Instrumentation	5
ETE 4325C	Advanced Control Systems	5
ETE 4665C	Digital Process Control Systems	5

Mechanical

EVS 3215C	Applied Hydraulics	5
ETM 4205	Applied Thermodynamics	5
BCN 3402C	Mechanics of Materials	5

Including both lower and upper division coursework, each student must complete a minimum of 34 quarter hours in communications, social science and humanities, and a minimum of 34 quarter hours in basic science and mathematics.

Civil Engineering Technology

This program emphasizes a broad range of knowledge and skills necessary to participate in major projects, such as construction, design and analysis of highways, waterways, buildings, transportation facilities, public works and development. The program is professionally accredited by the Engineers' Council for Professional Development (ECPD).

LOCATION: Tamiami Campus Only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION: Academic credit or proven competency in the following areas: mathematics through calculus, physics, surveying, construction materials, engineering drawing, statics.

Remark: A student without this preparation may obtain it while completing the upper division program, by taking additional electives.

(Continued)

Engineering Technology

UPPER DIVISION PROGRAM:

		Quarter Hours
*Major Requirements:**		80
ETC 3322C	Advanced Surveying	5
BCN 3762	Codes and Specifications	5
ETG 3530	Strength of Materials	3
ETG 3520L	Materials Testing	2
ETC 3412	Determinate Structural Analysis	3
ETC 3220C	Soil Mechanics and Foundations	5
ETC 3210L	Soil Mechanics Laboratory	2
ETC 3420	Indeterminate Structural Analysis	5
ETC 4541	Traffic and Transportation Engineering Technology	5
ETC 4502	Geometric Design of Highways	5
ETC 4440	Steel Design	5
ETC 4450C	Reinforced Concrete Design	5
ETC 4429	Computer Applications in Structural Analysis and Design	5
COP 3112	Introduction to Computers	5
EVS 3215C	Applied Hydraulics	5
EUS 3200	Introduction to Environmental and Urban Systems	5
ETI 4671	Engineering Economy	5
ETG 3510	Dynamics	5

*or demonstrated competency

Electives: selected with an advisor to meet objectives: 10

(Minimum) 90

Including both lower and upper division course work, each student must complete a minimum of 34 quarter hours in communications, social science, and humanities, and a minimum of 34 quarter hours in basic science and mathematics.

Three specializations are available to the majors in Civil Engineering Technology, should they choose to not select the above general program. These specializations give the Civil Engineering Technology student the opportunity to pursue an area of specialization in Environmental Systems, Planning Systems, or Transportation Systems.

These three specializations emphasize the interactions of people with their designed environment. The graduates of these specializations will have gained a learning experience to improve the quality of life through the insight obtained with a broad background of natural sciences, social sciences, and technical courses.

LOWER DIVISION PREPARATION:
In addition to the required preparation for the general upper division program of Civil Engineering Technology, the student should have academic credit or proven competency in chemistry and biology for the specializations. A student without such preparation may correct any of the deficiencies while pursuing the program by taking additional courses.

ENVIRONMENTAL SYSTEMS

Instead of taking the 25 credits of ETC 4502, ETC 4429, EUS 3200, and the electives (10) in the general program of Civil Engineering Technology, the student will replace these credits with the following courses as the specialization requirements:

EVS 3360	Air Resources
EVS 3264C	Water Resources
EVS 4233C	Unit Operations I
EVS 4234C	Unit Operations II
EVS 4463C	Water Supply Systems

The following additional courses are recommended:

EVS 3219C	Aquatic Systems
ENC 3353	Report and Technical Writing

PLANNING SYSTEMS

Instead of taking the 25 credits of ETC 4502, ETC 4429, EUS 3200, and the electives (10) in the general program of Civil Engineering Technology, the student will replace these credits with the following courses as the specialization requirements:

ETC 3570	Introduction to Transportation Systems
URP 3000	Urban Planning Concepts
EVS 3264C	Water Resources
URP 4021	Urban Land Use Planning
ARC 4335C	Site Development

The following additional courses are recommended:

EVS 3360	Air Resources
ENC 3353	Report and Technical Writing

TRANSPORTATION SYSTEMS

Instead of taking the 25 credits of BCN 3762, ETC 4429, EUS 3200, and the (10) credits of electives in the general program of Civil Engineering Technology, the student will replace these credits with the following courses as specialization requirements:

ETC 3570	Introduction to Transportation Systems
URP 3000	Urban Planning Concepts
EVS 3264C	Water Resources
ETC 4560	Transportation Planning
URP 4021	Urban Land Use Planning

The following additional courses are recommended:

EVS 3360	Air Resources
ENC 3353	Report and Technical Writing

Mechanical Engineering Technology

This program offers specialization in the application of energy, materials, mechanics, and design to industrial problems.

LOCATION: Tamiami Campus only.

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:
Academic credit or proven competency in the following areas: mathematics through calculus, physics, engineering drawing, statics, manufacturing processes.

Remarks: A student without this preparation may obtain it while completing the upper division program by selection of additional electives.

UPPER DIVISION PROGRAM:

		Quarter Hours
Major Requirements:		90
ETG 3530	Strength of Materials	3
ETG 3520L	Materials Testing	2
ETE 3034C	Introduction to Circuit Analysis	5
ETE 3101	Introduction to Electronics	5
MAN 3504	Industrial Operations	5
ETI 4671	Engineering Economy	5
COP 3112	Introduction to Computers I	5
ETG 3510	Dynamics	5
ETM 3801	Basic Materials	5
ETM 3510	Mechanical Design I	5
ETM 4205	Applied Thermodynamics	5
ETM 4225C	Energy Systems	5
ETM 4720	Air Conditioning Refrigeration Principles	5
ETM 4221L	Mechanical Laboratory	2
ETM 4643L	Air Conditioning and Refrigeration Laboratory	2
ETM 4205L	Applied Thermodynamics Lab	2

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Engineering Technology

ETM 4652	Instrumentation	5
EVS 3215C	Applied Hydraulics	5
*Electives selected with an advisor in an area of specialization:		14
Minimum Upper Division Required Hours:		90

*Typical specialization areas:

1. Heating, Ventilating & Air Conditioning Design Specialization (Professional Certificate)

ETM 4750	Air Cond. Design I	3
ETM 4752	Air Cond. Design II	3
BCN 3560C	Mechanical Systems in Construction	5
BCN 3521	Electrical Systems in Construction	5

2. Electromechanical Specialization

ETE 3121C	Advance Circuit Analysis	5
ETE 3565C	Introduction to Electrical Power	5
ETE 3526C	Electrical Machinery	5
ETE 4565C	Electrical Power Systems I	5
ETE 4567C	Electrical Power Systems II	5

3. Power and Energy Specialization

ETM 3312	Fluid Power	5
ETM 5238	Heat Transfer	5
ETM 5260	Solar Energy Technology & Application	5
ETG 4930	Ocean Energy Systems	5

4. Manufacturing Specialization

ETM 4511	Mechanical Design II	5
ETI 3645	Production Planning & Control I	5
ETI 3661	Plant Layout	5
ETI 4603	Method Improvement	5
ETI 4660	Material Handing	5

Including both lower and upper division course work, each student must complete a minimum of 34 quarter hours in communications, social science, and humanities, and a minimum of 34 quarter hours in basic science and mathematics (general education requirements.)

Professional Certificate Program

Heating, Ventilating, and Air Conditioning Design

The purpose of this professional certificate program is to produce a learning experience that will enhance the design capabilities of professionals in the field. Emphasis will include engineering science background as well as practical applications of systems design.

The certificate will be awarded to a student who successfully demonstrates competency in:

ETM 4205	Applied Thermodynamics	5
BCN 3560C	Mechanical Systems in Construction	5
ETM 4720C	Principles of Air Conditioning & Refrigeration	5
ETM 4225C	Energy Systems	5
ETM 4750	Air Conditioning Design I	3
ETM 4221L	Mechanical Lab I	2
ETM 4642	Air Conditioning Design II	3
ETM 4643L	Mechanical Lab II	2
ETI 4671	Engineering Economy	5

Master of Science in Environmental and Urban Systems

Admissions Requirements

The applicant must meet the general University admission requirements and should have completed an undergraduate major in environmental or urban systems, engineering, the natural sciences or a related field. Students who do not meet the stated criteria may be considered for admission if they have completed certain prerequisites and have work experience or other qualifications in the field. Additional courses may be required for some areas of specialization.

Degree Requirements

To be eligible for a Master's Degree in the area of Environmental and Urban Systems, a student must:

1. Satisfy all University requirements for a Master's Degree.
2. Meet any undergraduate deficiencies, the requirements of the core, and complete a specific program of study.
3. Complete a minimum of 53 quarter hours of graduate level courses. (Not more than 10 graduate credit quarter hours can be transferred from other accredited institutions.)
4. Achieve a "B" average or better in all graduate work.
5. Complete an acceptable graduate thesis.

The M.S. in Environmental and Urban Systems consists of 53 quarter hours of graduate credit.

Course Descriptions

COMPUTER ENGINEERING TECHNOLOGY

Definition of Prefixes

ETE–Engineering Technology: Electrical; COP–Computer Programming.

ETE 3620C Logic Design (5)
Karnaugh maps and Quine McCluskey reduction techniques, study of analytical and empirical tools necessary to design with digital IC's, combinational logic, and sequential circuits are considered (includes lab). Prerequisite: Boolean Algebra.

ETE 3650C Computer Hardware Fundamentals (5)
Analysis of computer elements and systems composed of flip-flops registers, counters, adders, etc., study of a basic arithmetic unit, core memory system, control units and organization of these units into a system (includes lab). Prerequisite: Boolean Algebra.

ETE 3661C Advanced Computer Systems (5)
Study of hardware computer systems and components in a laboratory environment, arithmetic and memory system, complete minicomputer, digital communications system, digital modem input-output interface (includes lab). Prerequisite: ETE 3620C.

ETE 4621C Advanced Logic Design (5)
Analysis, design and optimization of combinational systems, and interactive networks; study of digital systems such as multiplexers, D/A and A/D converters, digital multimeters, modems, arithmetic circuits, etc. Prerequisite: ETE 3620C.

ETE 4669 Micro Processors (5)
Lecture/Lab–Including hardware, organization, interfacing, system components, application, design and selection. System development and usage through software. Prerequisites: COP 3110 and ETE 3661C.

COOPERATIVE EDUCATION

Definition of Prefixes

ETG–Engineering Technology: General.

ETG 3949 Cooperative Education Technology (5)
Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

(Continued)

Engineering Technology

ETG 4949 Cooperative Education Technology (5)
Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the co-op program with consent of advisor. Evaluation and reports required.

ELECTRICAL ENGINEERING TECHNOLOGY

Definition of Prefixes
ETE–Engineering Technology: Electrical; ETG–Engineering Technology: General; BCN –Building Construction.

BCN 3521 Electrical Systems in Construction (5)
A survey of electrical and lighting requirements for residential, industrial, and commercial buildings. Emphasis on estimating circuits, power requirements, layout constraints, etc. No prerequisites.

ETE 3030 Survey of Electronics (5)
The basic principles of AC and DC circuits, solid state devices, and fundamental electronic circuits. This course is intended for students outside of the Electrical Engineering Technology major with no prior knowledge of electronics (includes lab).

ETE 3030L Electrical and Electronic Laboratory (2)
Introduction to laboratory equipment and techniques for pre-engineering students. Includes laboratory experiments on AC and DC circuits, electronic equipment and circuits. Instrumentation such as meters, oscilloscopes, generators, etc. Corequisite: ETE 3101.

ETE 3034C Introduction to Circuit Analysis (5)
Introduction to AC and DC circuit analysis. Use of complex algebra and phasors. Loop and node analysis. Resonance circuits. Introduction to three phase circuits. Transient analysis of first and second order circuits using calculus. Prerequisites: MAC 3412 and Physics with electricity or equivalent.

ETE 3101 Introduction to Electronics (5)
Introduction to electronic circuit elements and analysis using calculus. Diode and transistor principles and circuits. Survey of pulse and digital circuits and various semiconductor devices. Prerequisite: ETE 3034C or equivalent. Corequisite: ETE 3030L.

ETE 3121C Advanced Circuit Analysis (5)
This course provides the student with a basic knowledge of Laplace transforms for practical applications in networks and systems. Complex frequency poles and zeros concepts and applications, transformed networks, Fourier transform and signal spectra are also covered. Prerequisite: ETE 3034C or equivalent. Corequisites: MAC 3412 and ETE 3101.

ETE 3142 Solid State Devices (5)
Study of virtually all modern semiconductor devices with applications, MOFSET, photodetectors, thyristors, unijunction transistors, special diodes, etc. (includes lab). Prerequisite: ETE 3101 or equivalent.

ETE 3323C Practical Linear Systems (5)
Basic concepts and application of linear systems, feedback systems, stability analysis, Bode plots and root-locus techniques. Prerequisite: ETE 3121C.

ETE 3421C Communication Systems (5)
Definitions, basic concepts and application of analog and digital modulation techniques. Modulators for generating various signals and demodulators for information recovery are studied. Quantization. Decoding. Effect of noise in communication systems. Prerequisite: ETE 3034C or equivalent.

ETE 3422 Transmission Systems for Communication (5)
Use of Smith Chart. Different transmission lines and microwave channels. Laboratory experiments using spectrum analyzers to study AM, FM and pulse modulation system. Simulation of transmission lines. Prerequisite: ETE 3421C.

ETE 3526C Electric Machinery (5)
Analysis of rotating electric machinery with emphasis on industrial applications (includes lab). Prerequisite: ETE 3565C, or equivalent.

ETE 3565C Introduction to Electrical Power (5)
Structure of electrical power systems. Major components and modern energy systems. Magnetism and magnetic circuits. Mutual induction and self induction. Three-phase circuit analysis and per unit calculations. Transformers and transformer connections. Energy conversion. Power system loads and statistical load-forecasting. Calculation of cost of electrical energy. Prerequisite: ETE 3034C or equivalent.

ETE 4123C Electronic Circuit Analysis (5)
Analysis and design of electronic circuits using bipolar transistors. FET's and MOSFET's. Application of frequency response techniques to the analysis and design of feedback amplifiers, tuned amplifiers, oscillators, modulators and demodulators, power amplifiers etc. Introduction to integrated circuits. Prerequisites: ETE 3121C and ETE 3142 or equivalents.

ETE 4161C Integrated Circuits Analysis and Application (5)
Application of state-of-the-art integrated circuits. Comparison of different IC's from the SSI, MSI, and LSI areas. Design and characteristics of linear and digital integrated circuits Prerequisite: ETE 4123C & ETE 3620.

ETE 4170C Passive and Active Filters (5)
Practical application of passive and active filters to communication and process control systems. laboratory applications. Prerequisite: ETE 3121C.

ETE 4324C Process Control Instrumentation (5)
Servomechanisms analysis and design. Sensors, transducers, recorders, error detecting devices and other electronic and electromechanical components of control systems. Basic lab experiments on servomotors, tachometers, synchros, operational amplifiers as components and systems. Use of analog computer. Prerequisite: ETE 3323C.

ETE 4325C Advanced Control Systems (5)
Practical design of control systems. Industrial applications. Design and hardware implementation of industrial controllers. Control algorithms. Use of root-locus and Bode plots. Includes lab. Prerequisite: ETE 3323C.

ETE 4426C Advanced Communication Systems (5)
Study of advanced communication systems and techniques. Emphasis is placed on the study of digital and FM systems. Phase-lock techniques, noise analysis. threshold data, and transmission are among the subjects extensively covered (includes lab). Prerequisite: ETE 3421.

ETE 4565C Electrical Power Systems I (5)
Power network concepts. AC & DC transmission power transmissions, power transmission lines, power network representations, basic network solutions, symmetrical fault studies, symmetrical components. Prerequisite: ETE 3565C, or instructor's consent.

ETE 4567C Electrical Power Systems II (5)
Unsymmetrical faults and loads; the bus impedance matrix solutions for fault studies. Control of voltage, watts, vars. Load flow, economic dispatch and system stability. Prerequisite: ETE 4565C, or imstructor's consent.

ETE 4685C Digital Process Control Systems (5)
Study of digital process control systems. Time frequency response to discrete systems. Digital controllers. Application to industrial processes. Laboratory work with digital components and systems (includes lab). Prerequisite: ETE 3323C.

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Engineering Technology

ETG 4905 Independent Study (1–5)
Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.

ETG 4930 Special Topics (1–5)
For a group of students who wish an intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and Department Chairperson is required.

CIVIL ENGINEERING TECHNOLOGY

Definition of Prefixes
ETC–Engineering Technology: Civil; ETG–Engineering Technology: General.

BCN 3210C Construction Materials (5)
Lecture/Lab–A study of the origins, production and uses of construction materials, such as concrete, steel, aluminum, wood, plastics, brick and stone. Includes testing lab, which consists of testing and evaluating properties of construction materials. Prerequisite: Physics.

ETC 3210L Soil Mechanics Laboratory (2)
Laboratory experiments in identification, properties and behavior of soils. Prerequisite or corequisite: ETC 3220C.

ETC 3220C Soil Mechanics and Foundations (5)
Identification and properties of soils. Behavior of soils relating to design and construction of foundations for structures and pavements. Prerequisite: BCN 3402C or ETG 3530.

ETC 3321L Surveying (5)
Lecture/Lab–Computations and field procedures associated with measuring of distances and angles, using tape, level and transit. Laboratory included with field measurements. Prerequisite: Trigonometry.

ETC 3322C Advanced Surveying (5)
Lecture/Lab–Computations and field procedures for earthworks and horizontal and vertical curves. Applications in establishing horizontal and vertical control in boundary determination, mapping, photogrammetry. Laboratory is included which consists of field measurements, layouts and computations. Prerequisite: ETC 3321L or equivalent.

ETC 3323C Land Surveying (5)
The theory and practice of land surveying, including computations, procedures, platting, records, land descriptions, legal aspects, control requirements, urban surveys, coastal boundary surveys, astronomical observations, U.S. Government and State requirements. Cadastral surveying and professional registration. Prerequisite: ETC 3321L.

ETC 3412 Determinate Structural Analysis (3)
Analysis of statically determinate structural systems by analytical methods. Reactions: shear, axial and moment diagrams, truss analysis, influence lines: moving loads. Prerequisite: ETG 3530 or equivalent.

ETC 3420 Indeterminate Structural Analysis (5)
Analysis of indeterminate structural systems. Development and use of theorems of moment area, conjugate beam, elastic weights, virtual work. Slope deflection and moment distribution methods. Moving loads and influence lines. Introduction to stiffness method and flexibility methods. Application of matrix methods. Prerequisite: ETC 3412.

ETC 4222C Foundations Design and Construction (5)
Use of soil mechanics and subsurface construction theory and practice for design and construction of foundations for buildings and other engineering facilities. Topics include shallow and deep foundations, excavation, bracing and retaining structures. Prerequisite: ETC 3220C.

ETC 4429 Computer Applications in Structural Analysis and Design (5)
Discussion and application of various available computer programs and equipment for structural analysis and design. Application of the stiffness method and the flexibility method of structural analysis. Prerequisites: BCN 4431, ETC 4450C and COP 3112.

ETC 4440 Steel Design (5)
The analysis and design of structural elements and connections for buildings, bridges and specialized structures utilizing structural steel. Both elastic and plastic designs are considered. Prerequisite: ETC 3412.

ETC 4450C Reinforced Concrete Design (5)
The analysis and design of reinforced concrete beams, columns, slabs, retaining walls and footings. Both the working and ultimate strength design methods will be discussed, with primary emphasis corresponding to recent ACI Building Code. Prerequisite or corequisite: ETC 3420.

ETC 4460 Timber Design (5)
The analysis and design of modern wood structures. Effect of plant origin and physical structure of wood on its mechanical strength; fasteners and their significance in design. Prerequisite: BCN 3402C or ETG 3530 or equivalent.

ETC 4502 Geometric Design of Highways (5)
Route surveys by ground and aerial method-reconnaissance, preliminary and location surveys; geometric properties of highway surveys; spiral theory; design controls for both vertical and horizontal alignments. Applications of various available computer programs and equipment to the design of highways. ETC 3322C and COP 3112 or equivalent.

ETC 4541 Traffic and Transportation Engineering Technology (5)
Characteristics of traffic, roadway, vehicular and human factors. Design, development regulations in modern transportation systems. Stream of flow, capacity, parking, accident analysis and intersection characteristics. Prerequisites: COP 3112 and Calculus.

ETC 5422C Advanced Structural Design (5)
The design of structural systems to formalize the student's knowledge of the behavior of individual components into a final integrated structure. Continuous span and simple span highway bridges, culverts, retaining walls, rigid frames, multistoried buildings and similar problems of interest to the student. Prerequisites: ETC 4440 and ETC 4450C.

ETC 5470 Prestressed Concrete Design (5)
The behavior of steel and concrete under sustained load. Analysis and design of pre-tensioned and post-tensioned reinforced concrete members, and designing these members into the integral structure. Prerequisite: ETC 4450C.

ETC 5507C Advanced Geometric Design of Highways (5)
Parameters governing the geometric design of highways; curve super-elevation; widening on highway curves; elements of intersection design; design of interchanges; use of AASHO design guidelines. Design project required. Prerequisite: ETC 4502.

ETC 5514 Pavement Design (5)
Analysis and design of sub-base, base and pavement of a roadway. Discussions of flexible pavement and rigid pavement as structural units. Boussinesq's approach. Westergaard's theory. Beams on Elastic Foundations. Prerequisites: ETC 3220C and ETC 4450C.

ETG 3502 Statics (3)
Study of forces acting on bodies, including coplanar and non-coplanar forces, concurrent and non-concurrent forces, friction forces and hydrostatic forces. Prerequisites: Physics. Calculus.

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Engineering Technology

ETG 3520L Materials Testing Lab (2)
A laboratory study of principle materials with particular attention to their mechanical properties and significance for engineering uses. Prerequisite or corequisite: BCN 3402C or ETC 3530 or equivalent.

ETG 3530 Strength of Materials (3)
Axial, torsional, shear, bending and combined stress and strain analysis: mechanical properties and applications for static, dynamic, fatigue and creep conditions. Prerequisite: ETG 3502 or equivalent.

ENVIRONMENTAL AND URBAN SYSTEMS

Definition of Prefixes
EVS–Environmental Science; ETC–Engineering Technology: Civil; URP–Urban and Regional Planning; OCB–Oceanography-Biological.

ETC 3570 Introduction to Transportation Systems (5)
Role of transportation in urban and regional development; elements of the transportation system; characteristics and design considerations of various modes; the travel way; facilities; control and guidance; selected design standards and technology; operational characteristics; planning techniques.

ETC 4560 Transportation Planning (5)
Principles of transportation planning; origin-destination studies; methodology used in generating transportation plans; techniques for predicting and evaluating the consequences of various alternives; transportation planning for Dade County. Prerequisite: ETC 3570.

ETC 5571 Advanced Transportation Systems (5)
Examination of innovative transportation systems technology; technical feasibility; system attributes; energy requirements; marketability of proposed systems; probable effect on modal choice behavior; evaluation of possible applications in the Greater Miami area. Prerequisite: ETC 4560.

ETC 5572 Introduction to Urban Systems Modeling (5)
Transportation modeling; systems view of the urban area; planning applications of modeling. Prerequisite: COP 3112, or consent of the instructor.

ETC 5573 Urban Mass Transit Planning (5)
The mass transportation problems. Topics include: demand analysis and projection, marketing urban mass transit; existing urban mass transit systems in the U.S.; techniques for planning mass transit systems; governmental regulation and subsidies to the transportation sector. Prerequisite: ETC 5571.

EUS 3200 Introduction to Environmental and Urban Systems (5)
This course is designed for non-majors as an integrated approach to the role of technological man in the bioshpere. Emphasis is on methods for the environmental quality improvement of land, air, water, transportation, and planning systems.

EVS 3215C Applied Hydraulics (5)
A course to provide background in basic hydraulic technology. The fundamental theorems are studied and then applied to the collection and distribution of water and the collection and treatment of wastewaters.

EVS 3219C Aquatic Systems (5)
Biological, chemical and physical aspects of freshwater lentic and lotic ecosystems. Emphasis is on the freshwater systems of South Florida.

EVS 3264C Water Resources (5)
Study of the hydrologic cycle; ground and surface water occurrence and quality; sanitary protection of surface and groundwater; sources of pollution; water quality management; multipurpose uses of water and reuse; determination of municipal, industrial, and agricultural water requirements.

EVS 3268C Marine Technology (5)
Technological aspects of ocean systems. Prerequisite: EVS 3219 or consent of instructor.

EVS 3360 Air Resources (5)
An introductory course on characteristics of the earth's atmosphere and aspects of air pollution. Classification and sources of air pollutants. Effects of air pollutants on health, vegetation and property. Control measures, legislation and projections.

EVS 3420C Environmental Instrumentation (5)
A lab/field course for the critical evaluation of basic instrumental methods of environmental sampling and analysis. Includes field sampling (sample preparation and storage), laboratory skills, and legal considerations.

EVS 3428 Environmental Management (5)
The wise use of land and water for parks and recreational areas. Environmental design and need for green spaces. Ecologically safe methods for the control of vegetation and insects.

EVS 3601C Environmental Health (5)
The effects of environmental pollutants on man's health and the quality of life.

EVS 4233C Unit Operations I (5)
Principles of wastewater treatment. Physical and biological unit treatment operations, including sludge digestion. Significance of laboratory tests. Laboratory work and occasional field trips required. Prerequisite: EVS 3215.

EVS 4234C Unit Operations II (5)
A continuation of EVS 4233, incorporating chemical unit operations including effluent disinfection. Laboratory work and occasional field trips required. Prerequisite: EVS 4233C.

EVS 4463C Water Supply Systems (5)
Development of water supplies. Treatment of water including disinfection techniques. Distribution systems. Laboratory work. Prerequisite: EVS 3264C and EVS 4233C, or consent of instructor.

EVS 4905 Independent Study (1–5)
Individual research studies available to academically qualified students. Consent of instructor required.

EVS 4930 Special Topics (1–5)
Study of specific aspects (of environmental technology or urban systems) not available through formal course study. Open to academically qualified students. Consent of instructor required.

EVS 5218 Advanced Hydraulics (5)
An advanced course in hydraulics. Topics include open channel flows, spillways, stilling basins, energy-dissipating devices, rheology, and principles of fluidics. Prerequisite: EVS 3215, or consent of instrructor.

EVS 5235C Wastewater Collection and Treatment (5)
Wastewater collection systems. Integration of unit operations into the planning and design of treatment plants, including sludge handling and disposal. Prerequisites: EVS 4233 and EVS 4234, or consent of instructor.

EVS 5242 Water Quality Management (5)
Predicting and evaluating the effects of human activities on streams, lakes, estuaries and groundwaters; and the relation of human activities to water quality and protection of water resources. Prerequisite: EVS 4234, or consent of instructor.

EVS 5261 Biological Monitoring of Freshwater Ecosystems (5)
The use of aquatic insects and other invertebrates to monitor changes in the aquatic environment. The ecological aspects of aquatic insects in relation to pollution stress are assessed. Prerequisite: EVS 3219, or consent of instructor.

EVS 5267 Water Quality Indicators (5)
Ecological studies of micro and macro-organisms which are indicators of water quality. Emphasis on bioassays and early warning systems. Prerequisite: EVS 5261, or consent of instructor.

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Engineering Technology

EVS 5361 Air Sampling and Analysis (5)
Practical laboratory work and theoretical aspects involved in a wide range of air sampling and analysis systems. Critical comparison and examination of methods and instrumentation. Source testing, instrumental sensitivity, applicability and remote sensing systems. Prerequisite: EVS 3360 or EVR 4231.

EVS 5362 Air Pollution Control (5)
Air pollution control–devices, principles, efficiencies, costs. Gas scrubbers, electrostatic precipitators, thermal deposition, filters, condensors, after-burners. By-product recovery. Stoichiometry of combustion mixtures and basic industrial plant designs are discussed. Prerequisite: EVS 3360 or EVR 4231.

EVS 5369 Air Quality Management (5)
A course in air resources designed to review the administrative, legislative and regulatory process in air pollution control. Agencies, surveillance networks, data, criteria for establishing standards, regulations and educational programs.

EVS 5421C Industrial and Environmental Toxicology (5)
Introduction to toxicological studies in the urban environment. Prerequisite: EVS 3601C, or consent of instructor.

EVS 5425C Vector and Pest Control (5)
Effects and management of public health vectors and communicable diseases. Prerequisite: EVS 3601C, or consent of instructor.

EVS 5426C Advanced Environmental Instrumentation (5)
A laboratory oriented course, dealing with the most sensitive and sophisticated instruments used in environmental analysis. Covers theory of specialized laboratory procedures and instruments, optics, electronics, design, cost, versatility, and operational instrument parameter considerations. Assigned projects. Prerequisite: EVS 3420C, or consent of instructor.

EVS 5682 Solid Waste Management (5)
In-depth study of the solid waste problem. Topics include municipal, industrial, and agricultural generation of wastes; municipal collection systems; methods of disposal, hazardous wastes, and energetic considerations in the recovery and recycle of wastes.

EVS 5741 Noise (5)
Fundamentals of sound and noise. Health hazards and other effects. Case studies–measurement and noise control in transportation, environment, construction and industry. Abatement laws and ordinances in Dade County and worldwide.

EVS 5905 Independent Study (1–5)
Individual research studies available to academically qualified students on graduate status.

EVS 5930 Special Topics (1–5)
Specific aspects of environmental technology and urban systems not available through formal course study. Open to academically qualified students only.

EVS 6050C Advanced Planning Implementation (5)
Critical examination of traditional implementation tools. New growth management strategies –moratoria, filming, capital improvement programs, PPBS. Case studies from U.S.A. Innovative methods and governmental policies. Prerequisite: URP 4021 and URP 4011.

EVS 6051C Advanced Unit Operations I (5)
Theory and design of physical, chemical, and biological unit operations as applied to the advanced treatment of water and wastewater. Prerequisite: EVS 5242.

EVS 6052C Advanced Unit Operations II (5)
A continuation of EVS 6051C including the reuse of treated wastewaters and of sludges. Prerequisite: EVS 6051C.

EVS 6053C Advanced Treatment Systems (5)
Integration of unit operations into advanced treatment systems for waters and wastewaters. Prerequisite: EVS 6052C.

EVS 6054 Aquatic Reclamation (5)
Evaluation of techniques to improve the water quality of lakes, canals and rivers. Cultural eutrophication corrective measures are emphasized. Prerequisites: EVS 3219, EVS 5267, or consent of instructor.

EVS 6269C Industrial Wastewater Treatment (5)
Characteristics and composition of industrial wastewaters. Sampling techniques and analyses. Water conservation and reuse. Joint industrial-municipal collection and treatment of wastwaters. Prerequisite: EVS 6053C.

EVS 6422 Environmental Assessment (5)
An examination of alternative techniques useful for the analysis and evaluation of environmental impacts of man's activities. Prerequisite: URP 6821.

EVS 6424 Air-Land Interface Studies (5)
An environmental evaluation of the relationship between the atmosphere and the continental surfaces in a non-urban or natural system. Prerequisite: EVR 5236, or consent of instructor.

EVS 6603 Advanced Industrial and Environmental Toxicology (5)
Laboratory investigations with toxic substances, especially those related to man-made pollution. Prerequisites: EVS 3601, and EVS 3421.

EVS 6939 Seminar (1–3)
The course consists of oral presentations made by students, guests and faculty members on current topics and research activities in environmental and urban systems.

EVS 6970 Thesis (10)

OCB 4702 Aquatic Products (5)
Commercial products, already developed, which may be obtained from aquatic systems. Prerequisite: EVS 3268, or consent of instructor.

OCB 6631 Air-Water Interface Studies (5)
Mechanisms of materials transfer from water bodies to the atmosphere and from the atmosphere to the water will be discussed. Prerequisite: EVS 3360.

URP 3000 Urban Planning Concepts (5)
Planning fundamentals; objectives and scope of urban planning; theories of land use patterns; population studies; cohort survival technique; employment studies; economic studies; estimating demand for various land usage; physical, social, political and managerial conditions; comprehensive plan and its elements, aesthetics and design concepts for communities; implementation tactics.

URP 4011 Planning Implementation (5)
Planning law and administration; practice in formulation of zoning ordinance; land subdivision, urban renewal; trends and innovations in control of growth–case studies in U.S.A.; critical path method (CPM); planning, programming, budgeting systems (PPBS) and capital improvement programs. Prerequisite: URP 3000.

URP 4021 Urban Land Use Planning (5)
Elements of the general land use plan, location and space requirements; the use of models in planning; development of the land use plan; policy plan, implementation. Prerequisite: URP 3000.

URP 4030 Analysis of Technological Systems (5)
Fundamental concepts of systems analysis; types of systems; input-output relationship; positive and negative feedback control; generation of system alternatives; tradeoff and sensitivity analysis; elementary optimization techniques.

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Engineering Technology

URP 5400 Urban and Regional Analysis (5)
Theories of urban and regional growth; collective utility analysis; input-output models in planning; application of linear programming to regional social accounting; economic base analysis. Prerequisite: COP 3112, or consent of instructor.

URP 5425 Environmental Planning (5)
Ecological principles necessary to preserve a quality environment are presented by means of planning policies, processes and environmental indicators. Emphasis will be placed on the impact of growth on environmental quality. Prerequisites: EVS 3360, URP 3000 and EVS 3264.

URP 6423 Environmental Modeling (5)
Evaluation of regional resources, environmental stresses, and considerations in regional systems; systems analysis in environmental management and its relation to decision making; modeling of air and water systems. Prerequisites: COP 3112, ETC 5572, or consent of instructor.

URP 6821 Urban Systems Analysis (5)
The urban areas as a complex system; modeling the urban growth processes; statistical decision making games; modeling and simulation; cost effectiveness; application of the theory; a system-wide view of the Miami area. Prerequisite: COP 3112, URP 4030, or consent of the instructor.

MECHANICAL ENGINEERING TECHNOLOGY

Definition of Prefixes
BCN–Building Construction; COP–Computer Programming; ETG–Engineering Technology: General; ETI–Engineering Technology: Industrial; ETE–Engineering Technology: Electrical; ETM–Engineering Technology: Mechanical; MAC–Mathematics: Calculus.

BCN 3560C Mechanical Systems in Construction (5)
A survey of plumbing, heating, air conditioning and ventilation systems for building (includes lab).

ETG 3510 Dynamics (5)
Study of the motion of particles and members applied to technical problems. Impact momentum and mechanical energy. Prerequisites: MAC 3412, and ETG 3502, or equivalent.

ETI 3411C Manufacturing Processes I (5)
An introduction into the processes used to convert raw materials into finished products. Includes information on casting, forging, machining, and forming (includes lab).

ETM 3312 Fluid Power (5)
A study of the development, transmission and utilization of power through fluid power circuits and controls (includes lab). Prerequisite: EVS 3215C, or equivalent.

ETM 3510 Mechanical Design I (5)
Design analysis of elementary machine members including shafting, springs, screws, belts, clutches, brakes, chains, welds, and rivets. Prerequisites: ETG 3510, ETG 3530, or equivalent.

ETM 3801 Basic Materials (5)
A study of ferrous and nonferrous metals and alloys. Includes atomic structure, bonding, and arrangement of atoms; phase diagrams; reactions within solid materials, and the interrelation of these to show how structure determines the properties of a material.

ETM 4205 Applied Thermodynamics (5)
Fundamental concepts of basic thermodynamics, including thermodynamic properties and processes, first and second laws of thermodynamics and application of the principles to energy conversion systems, introduction to heat transfer. Prerequisite: MAC 3412.

ETM 4205L Applied Thermodynamics Laboratory (2)
Conduction, convection and radiation experiments, regeneration, stirling and air standard power cycles, combustion processes. Prerequisites: ETM 4205C, ETM 4221, ETM 4643C.

ETM 4221L Mechanical Lab I (2)
The most modern available testing equipment is used for experiments in hydraulics, fluid power equipment, internal combustion engines including the Stirling Cycle Hot Air Engine, gas turbines, steam turbines, boilers, centrifugal and axial fans, rotary and sliding van compressors, convection and radiation and solar energy. Prerequisite: ETM 4205C.

ETM 4225C Energy Systems (5)
Review of theory and engineering aspects of conventional energy conversion systems, fuels and combustion, fossil fuels, and nuclear power plants. Mechanical engineering aspects of direct energy conversion (includes lab). Prerequisite: ETM 4205C, or equivalent.

ETM 4511 Mechanical Design II (5)
Continuation of the design analysis of elementary machine members, including lubrication, bearings, and gearing. Introduction to advanced analysis techniques. Prerequisite: ETM 3510.

ETM 4643L Air Conditioning and Refrigeration Lab (2)
Experiments in air conditioning, refrigeration, reverse cycle and strip heating, water cooling towers, automotive air conditioning, absorption refrigeration, and solar energy applications to heating and cooling. Prerequisite: ETM 4205C.

ETM 4652 Instrumentation (5)
Presentation of experimental methodology; basic instrumentation used in mechanical engineering and its calibration and use; accuracy, error and uncertainty in experimental measurements; engineering report writing (includes lab). Prerequisites: ETG 3530C, ETM 4205C, ETE 3034C, and senior standing.

ETM 4720 Air Conditioning Refrigeration Principles (5)
The theory, operation and control of heat pump cooling and heating, chemical absorption cooling and steam jet refrigeration systems. (Includes laboratory). Prerequisite: ETM 4205C.

ETM 4750 Air Conditioning Design I (3)
Psychrometry confort; mechanical refrigeration; heat pumps; load calculators; cooling coil performance; heating and humidification; air distribution duct design fans. Prerequisite: ETM 4205C.

ETM 4752 Air Conditioning Design II (3)
Air conditioning systems; piping, pumps, hydronics; chillers, boilers, piping and combinations; cooling towers; heat recovery systems; automatic control; instruments. Prerequisite: ETM 4750.

ETM 5238 Heat Transfer (5)
Fundamental concepts of conduction, convection and radiation heat transfer, including practical numerical analysis in addition to conventional analytical and empirical methods.

Prerequisites: MAC 3412, COP 3110 and ETM 4205C, or equivalent.

ETM 5260 Solar Energy Technology and Applications (5)
Basic principles of solar radiation, transmission and absorption. Flat plate, passive and focusing collectors. Thermal storage applications to water heaters, air conditioning, power generation, swimming pool heating and process heat supply, and their economies. Prerequisites: ETM 4225C, ETM 4206L.

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Home Economics

Home Economics

Betty Morrow, *Assistant Professar and Chairperson*
Florence Ogle, *Associate Professar*
Adele Smith, *Assistant Professar*
Penelope Storm, *Assistant Professar*
Greta Howard, *Instructor*

The Department offers a major in Home Economics with several areas of specialty intended for the student desiring a related career in business, industry or government. Specialties are available in Management and Consumer Affairs, Fashion Design Management, Fashion Merchandising Management, Clothing and Textiles, Family and Child Development, and Food and Nutrition, or the student may choose a General Home Economics program. All majors are required to obtain vocational experience through the completion of career traineeships.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science*

LOWER DIVISION PREPARATION:

Required: general education requirements for associate of Arts degree, associate in Fashion Design for those entering that specialty.

Recommended: courses in home economics, fashion, chemistry, economics, art, psychology, sociology, and anthropology.

Fashion Design Management

This program is open only to students who have completed an Associate degree in fashion design. It is planned for those desiring careers in the apparel industry in line coordination, production control or supervision, as well as design.

		Quarter Hours
Core Courses:		**21**
	Orientation	1
COA 3410	Consumer Resources	5
CTE 3401	Consumer Textiles	5
CTE 3761	Fashion Production and Distribution	5
HME 3210	Personal and Career Management	5
Specialization:		**60**
	Math or Statistics Course	5
CTE 3602	Fashion and Culture	5
CTE 3735	Advanced Fashion Illustration	5
CTE 3742	Pattern and Grading Analysis	5
CTE 3762	Cutting Analysis and Material Utilization	5
CTE 3763	Machine Evaluation and Selection	5
CTE 4764	Industrial Apparel Assembly and Quality Control	5
CTE 4765	Apparel Production Planning and Costing	5
CTE 4723	Fashion Design Seminar I	5
CTE 4724	Fashion Design Seminar II	5
ETI 4613	Methods Analysis	5
ETI 4681	Industrial Supervision	5
Career Traineeship		**10**
CTE 4880	Apparel Field Experience	10

Fashion Merchandising Management

The Fashion Merchandising specialization is designed for students seeking management careers in the fashion industry in buying, coordination, advertising, customer relations, operations, visual merchandising, manufacturing and merchandise management.

		Quarter Hours
Core Courses:		**26**
	Orientation	1
COA 3410	Consumer Resources	5
CTE 3312	Clothing and the Consumer	5
CTE 3401	Consumer Textiles	5
CTE 3602	Fashion and Culture	5
HME 3210	Personal and Career Management	5
Specialization:		**27**
COC 3300	Introduction to Computers and Computer Applications	5
CTE 3761	Fashion Production and Distribution	5
CTE 3852	Visual Merchandising	5
CTE 4821	Quantitative Decisions in Fashion Retailing	5
CTE 4827	Fashion Buying and Merchandising Strategy	5
CTE 4890	Fashion Merchandising Career Seminar	2
Related Business Courses:		
MAR 3023	Marketing Management	5
MAR 4153	Retail Management I	5
MAR 4154	Cases in Retail Management	5
MAR 4303	Advanced Management	5
Advised Electives		**10**
Career Traineeship		**10**
CTE 4880	Apparel Field Experience	10

Clothing and Textiles

Students interested in working in fabric retailing as pattern company representatives or clothing construction instructors for business, or in specialized areas such as custom dressmaking and tailoring, would choose this area of specialization. Students holding an A.S. or A.A. degree in Fashion Design may desire to major in this program.

		Quarter Hours
Core Courses:		**28**
	Orientation	1
CHD 3220	Child Development: Infancy and Early Childhood	5
COA 3410	Consumer Resources	5
FAD 4230	Family Life Cycle	3
FOS 3004	Food and Consumer	4
HME 4210	Personal and Career Management	5
HHD 4420	Home Furnishings and Equipment	5
Specialization:		**49**
CHM 3030	Survey of General Chemistry and Lab	7
CHM 3200	Survey of Organic Chemistry and Lab	7
CTE 3310	Basic Clothing Construction	5
CTE 3401	Consumer Textiles	5
CTE 3602	Fashion and Culture	5
CTE 3761	Fashion Production and Distribution	5
CTE 4340	Advanced Clothing Construction	5
CTE 4352	Tailoring	5
CTE 4741	Pattern Alterations	5
Advised Elective:		**5**
Career Traineeship		
CTE 4880	Apparel Field Experience	**10**

(Continued)

Home Economics

Management and Consumer Affairs

This specialization is planned to lead to an academic certificate from the Institute of Consumer Affairs as well as a B.S. from the School of Technology. It is intended to lead to careers as consumer consultants, counselors or representatives in business or governmental agencies. A separate track is available for students desiring to work with special groups such as the elderly or the handicapped.

		Quarter Hours	
Core Courses:			**33**
	Orientation	1	
CHD 3220	Child Development: Infancy and Early Childhood	5	
CTE 3312	Clothing and the Consumer	5	
CTE 3401	Consumer Textiles	5	
FAD 4230	Family Life Cycle	3	
FAD 4340	Family Dev: Adulthood and Aging	5	
FOS 3004	Food and the Consumer	4	
HHD 3151	Housing: Shelter and the Consumer	5	
HHD 4420	Home Furnishings and Equipment	5	
Specialization:			**47**
COA 3130	Personal and Family Economics	5	
COA 3410	Consumer Resources	5	
COA 4440	Consumer Counseling	5	
COA 4460	Consumer and Technology	5	
COA 5450	Consumer Legislation	5	
HME 4210	Personal and Career Management	5	
PAD 3034	Public Policy and Administration	5	
SOP 4645	Consumer Psychology	5	
SOP 4649	Experimental Consumer Psychology	7	
MAN 3010	Organization and Management	5	
Career Traineeship			**10**
COA 4940	Career Traineeship in Consumer Affairs	10	
Elective			**5**

Family and Child Development

Graduates from this program are prepared to enter professions which require a breadth of knowledge related to families and children, such as day care management, parent education, nursery school teaching, or employment in federal and state agencies serving the family.

		Quarter Hours	
Core Courses:			**25**
	Orientation	1	
COA 3410	Consumer Resources	5	
CTE 3602	Fashion and Culture	5	
3602	Fashion and Culture	5	
HME 3210	Personal and Career Management	5	
HHD 4420	Home Furnishings and Equipment	5	
HUN 4410	Nutrition Infancy Thru Adolescence	4	
Specialization			**41**
CHD 3220	Child Development: Early Childhood	5	
CHD 4230	Child Development: Later Childhood	5	
CHD 4830	Child Care Services	5	
FAD 3232	Changing Roles in Family Relations	3	
FAD 3253	Parenting	5	
FAD 4230	Family Life Cycle	3	
FAD 4340	Family Development: Adulthood and Aging	5	
FAD 4800	Management of Human Care Programs	5	
FAD 4940	Human Development Practicum	5	
Advised Electives			**15**
Career Traineeship			**10**
HOE 4940	Career Traineeship in Home Economics	10	

Food and Nutrition

This specialization provides professional preparation for a home economist who desires career opportunities related to food and nutrition but who does not desire to become a dietitian.

		Quarter Hours	
Core Courses:			**29**
	Orientation	1	
CHD 3220	Child Development: Infancy and Early Childhood	5	
COA 3410	Consumer Resources	5	
CTE 3312	Clothing and the Consumer	5	
FAD 4230	Family Life Cycle	3	
HME 3210	Personal and Career Management	5	
HHD 4420	Home Furnishings and Equipment	5	
Specialization:			**51**
CHM 3030	Survey of General Chemistry and Lab	7	
CHM 3200	Survey of Organic Chemistry and Lab	7	
Food and Nutrition Courses		37	
Career Traineeship			**10**
HOE 4940	Career Traineeship in Home Economics	10	

General Home Economics

This specialization is for those students who desire to become Home Economists but have no definite career goals related to one area of the field and do not plan to teach in the secondary schools.

	Quarter Hours	
Specialization:		**76**
Orientation	1	
Clothing and Textiles courses	15	
Family and Child Development courses	15	
Food and Nutrition courses	15	
Housing courses	15	
Consumer Management courses	15	
Advised Electives		**15**

Course Descriptions

CLOTHING AND TEXTILES
Definition of Prefix
CTE–Clothing and Textiles

CTE 3310L Basic Clothing Construction (5) Basic course, developing skills in wardrobe planning, clothing pattern and fabric selection, machine usage, and construction techniques, including their application in construction of apparel for personal use.

CTE 3312L Clothing and the Consumer (5) Consumer decisions related to the selection of fabrics, patterns, and ready-to-wear, with emphasis on quality and individual suitability, will be stressed. Includes construction of a simple garment, intended for Fashion Merchandising students and non-majors.

(Continued)

Home Economics

CTE 3401L Consumer Textiles (5)
Study of the physical properties of textile fibers, yarns, fabrics, color applications, and finishes, as they relate to care, performance, and consumer satisfaction. Identification and analysis of fibers and fabrics will be emphasized.

CTE 3602 Fashion and Culture (5)
Study of historical, social-psychological, and ethnic influences in fashion design. Includes analysis of current fashion influences.

CTE 3735L Advanced Fashion Illustration (5)
A continuation of fashion illustration techniques providing advanced work in rendering fabric drapery characteristics, construction details, color and texture. Prerequisite: One course in fashion illustration.

CTE 3742L Pattern Analysis and Grading (5)
The theory, geometric principles, and the methods of pattern making for apparel and allied products. The student develops complete sets of industrial patterns, including grading in accordance with accepted size ranges and specifications.

CTE 3761 Fashion Production and Distribution (5)
Study of apparel industries, with supervised observation of various aspects of production and distribution.

CTE 3762L Cutting Analysis and Material Utilization (5)
Principles and methods of cutting raw materials used in apparel products, including fabric inspection, scaling, marking, spreading, cutting, costing, and quality control. Principles of miniature marking and material utilization are also presented

CTE 3763L Machine Evaluation and Selection (5)
Study of thread, needles, stitch and seam formation as it relates to apparel products. Presents a survey of industrial sewing and pressing equipment and attachments. Cost considerations and payback periods are also examined.

CTE 3852L Visual Merchandising (5)
Study and application of the principles and techniques of creative "in store" and window displays. Field work included.

CTE 4340L Advanced Clothing Construction (5)
Additional experience in handling special fabrics, pattern and garment fitting; and application of principles and techniques of clothing construction. Prerequisite: CTE 3310, or equivalent.

CTE 4352L/5354L Tailoring (5)
Application of custom tailoring techniques through the construction of a suit or coat, with emphasis on fabric selection and pattern alteration. Graduate students will have additional requirements. Prerequisite: CTE 4340, or equivalent.

CTE 4421L/5421L Creative Textiles (5)
Laboratory class, in which students will explore techniques for designing and constructing textile fabrics. Experiences will include macrame, batik, tie-dying, weaving, knitting, and crocheting. Course is designed for Home Economics and Art Education majors. Graduate students will have additional requirements.

CTE 4442L Textile and Apparel Testing (5)
Fundamentals of the testing methods normally found in the plant laboratory. Various tests are presented that measure performance of the fabric and the completed garment. Includes statistical analysis of test results. Prerequisite: CTE 3401 or equivalent.

CTE 4723L/4724L Advanced Design Seminar I and II (10)
Provides an opportunity for apparel design majors to produce a line within given restrictions and industrial standards. A workroom atmosphere in which the designer creates and produces garments using draping and/or flat pattern methods. Prerequisite: A.S. degree in Fashion Design or equivalent.

CTE 4741L/5741L Pattern Alterations (5)
Stresses importance of pattern selection for individual figure types, and pattern alteration for special fitting problems. Students will construct a garment, make sample pattern alterations for special fitting problems, and alter a ready-made garment. Graduate students will have additional requirements. Prerequisite: CTE 3310 or equivalent.

CTE 4764L Industrial Apparel Assembly and Quality Control (5)
Analysis of the theory and methods of the assembly of apparel and allied products. Several apparel products are evaluated to determine construction sequence, machinery requirements, cost control, and quality specifications.

CTE 4765L Apparel Production Planning and Control (5)
Integrates all phases of apparel production by planning the best production cycle for an apparel item from receipt of raw materials to finished product. Topics include pay systems, work-in-process control, production scheduling and costing techniques. Prerequisites for Apparel Manufacturing majors: ETI 4613 and CTE 4764.

CTE 4821 Quantitative Decisions for Fashion Retailing (5)
Review of basic retailing math, and application of financial management principles, with emphasis on relationships between sales volume, stock turnover, expenses and profits. Case studies used in analyzing past and present performance and establishing budgetary goals. Intended for students seeking opportunities in retail apparel organizations.

CTE 4827 Fashion Buying and Mechandising Strategies (5)
Study and application of major considerations involved in buying and marketing of fashion merchandise. Includes creation and preparation of merchandise assortment plans, with emphasis on effective distribution.

CTE 4880 Apparel Field Experience (5-10)
Supervised "on-the-job" training and periodic seminars. Consent of faculty instructor required.

CTE 4890 Fashion Merchandising Career Seminar (2)
Exploration of local fashion-related career opportunities and proficiencies required for these positions. Guest speakers utilized.

CTE 4905/5905 Independent Study (1-5)
Specialized intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and department chairperson is required.

CTE 4930 Special Topics (1-5)
For groups of students who wish an intensive study of topics not otherwise offered in the University. Consent of faculty supervisor and department chairperson is required.

CTE 5345 New Trends in Clothing Construction (5)
A study of the latest techniques for sewing today's fabrics, including some factory methods. Prerequisite: CTE 4340 or equivalent.

CTE 5355L Tailoring Menswear (5)
Application of tailoring techniques commercially used in the production of menswear, through the construction of a knit jacket and trousers. Prerequisite: CTE 4340, or equivalent.

CTE 5422L Today's Textiles (5)
Exploration into recent developments in textile fibers and fabrics. Laboratory exercises in textile-testing procedures.

CTE 5746L Pattern Design (5)
Principles of pattern fitting will be explored, through the construction of basic sloper. Samples of various pattern design techniques will be constructed. Students will design and construct at least one garment. Prerequisite: CTE 4741, or CTE 4340

(Continued)

Home Economics

CTE 5930 Textiles and Clothing Seminar (1-5)
By permission of instructor only.

FAMILY LAND CHILD DEVELOPMENT
Definition of Prefixes
CHD–Child Development; FAD-Family Development

CHD 3220 Child Development: Infancy and Early Childhood (5)
Systematic study of total developmental process in the child from conception through early childhood emphasizing the effects of home and family environment. Includes observational experiences. Prerequisite: DEP 3001, or equivalent.

CHD 4230 Child Development: Later Childhood (5)
Extension of the study of developmental patterns of children, with emphasis on physical, intellectual, social and emotional maturation through adolescence. Analysis of environmental and home influences.

CHD 4830/5830 Child Care Services (5)
Analysis of methods for meeting the needs of parents and children using child care facilities. Emphasis on nurturing interaction with children, effective utilization of equipment, materials and community resources, and parent education. Observation/participation experiences provided. Graduate students will have additional requirements.

CHD 5264 Advanced Studies in Child Development (5)
Survey of current literature on selected areas, analysis of trends and issues, and investigation of recent research in Child Development. Prerequisites: CHD 3220, CHD 4320, or equivalent.

FAD 3232 Changing Roles in Family Relationships (3)
Emphasizes attitudes, feelings, communication, life styles in varying interpersonal relationships. Includes human sexuality component.

FAD 3253 Parenting (5)
An overview of changing concepts of parenthood and childhood. Explores contemporary issues concerning parenting with emphasis on maximizing human potential of parents and children. Open to non-majors. Recommended prerequisite: DEP 3001.

FAD 4230 The Family Life Cycle (3)
Study of the characteristics, problems, potentials and adjustments unique to the various stages of the family life cycle, including ethnic and cultural influences on family life patterns.

FAD 4340 Family Development: Adulthood and Aging (5)
Extension of the study of developmental patterns with emphasis on physical, intellectual, social and emotional influences with particular emphasis on the family and/or family substitute.

FAD 4800 Management of Human Care Programs (5)
Organization, management and administration of programs providing care services traditionally met within the family such as child care and day care for the elderly. Emphasis on use of family members and community resources for program enrichment.

FAD 4905/5905 Independent Study in Family Development (1-5)
Individually selected program of supervised study in a specific area of Family Development.

FAD 4930 Special Topics (1-5)
For groups of students who wish an intensive study of topics not otherwise offered. Consent of faculty supervisor and department chairperson is required.

FAD 4940 Human Development Practicum (3-5)
Experience in observing and working with individuals, in one or more phases of the human life cycle. Students may select a day care center, public school, nursing home, hospital or other community service agency. Prerequisites: CHD 3220, 4230, FAD 4230, or equivalent.

FAD 5255 Parent-Child Interaction in Varying Environments (5)
The effects of varying environments on members of households, interpersonal relationships, family values, life style, and interaction between members.

FAD 5260 Family Development (5)
The dynamics of family interaction and structure, including analysis of socioeconomic and cultural influences, crisis-producing situations, and current issues and trends affecting the family unit.

FAD 5450 Workshop in Family and Child Development (1-5)
Short-term intensive study of special facets, issues and trends of Child Development and/or Family Development.

GENERAL HOME ECONOMICS
Definition of Prefix: HOE-Home Economics: General

HOE 3949 Cooperative Education in Home Economics (5-10)
Supervised full time work quarter for Home Economics students. Limited to students admitted to the Co-op Program with consent of advisor. Evaluation and report required.

HOE 4930 Special Topics (1-5)
For groups of students who wish an intensive study of topics not otherwise offered. Consent of faculty supervisor and department chairperson is required.

HOE 4940 Career Traineeship in Home Economics (5-10)
Community based, supervised practical experience in a home economics-related career, to provide opportunity for career exploration in chosen field, and application of knowledge to practical situations. Permission of instructor required.

MANAGEMENT AND CONSUMER AFFAIRS
Definition of Prefixes
COA-Consumer Affairs; HME–Home Management & Equipment; HHD–Housing & Home Design.

COA 3130 Personal and Family Economics (5)
Examination of factors related to achieving personal and family goals through systematic financial planning. Overview of management by objectives, credit, insurance, investment, homeownership, and taxation, with opportunities for personal and family application.

COA 3410 Consumer Resources (5)
Evaluation of information needed to make effective consumer choices. Includes sources of consumer help and protection, pertinent legislation, and ecological conditions with which consumer interacts. Experiences provided in product and service comparison.

COA 4440 Consumer Counseling (5)
Application of consumer and management knowledge and skills to helping individuals and families make financial decisions. Case study approach used. For those who anticipate careers in helping professions involving consumer and credit services. Prerequisites: COA 3410, HME 4210, and permission of instructor.

COA 4460 Consumer and Technology (5)
Study of the interrelationship of the consumer and the industrial/business community, including the roles and responsibilities of each. Special topics include the effect of decisions on product cost, life styles and the environment, as well as the role of government in the marketplace.

(Continued)

Apparel Manufacturing Management

COA 4940 Career Traineeship in Consumer Affairs (5-10)
Community based, supervised practical experience in consumer-related career to provide exploration and application opportunities. Permission of instructor required.

COA 5450 Consumer Legislation (5)
Designed to provide those presently working in the consumer field, or preparing for a career related to consumer affairs, with current information on legislation affecting the consumer. Utilizes professionals in the community.

HHD 4420 Home Furnishings and Equipment (5)
Principles involved in the construction, selection, operation, and care of furnishings and equipment and their relationship to their environmental use. Prerequisite: IND 3020, or equivalent.

HME 3210 Personal and Career Management (5)
Application of management principles to personal and family living, as well as career effectiveness. Emphasis on planning and organizational skills as assets in the business world as well as tools with which to promote personal and family satisfaction. Open to nonmajors.

HME 3230 Management of Personal and Family Resources (5)
Application of management principles to personal and family decisions including human and non-human resources, including finances. Opportunity for community observation of management decisions made by persons of various ethnic groups and/or life styles and an analysis of the effect of these decisions on family relationships and personal success.

HME 4905/5905 Independent Study (1-5)
Individually selected program of supervised study in a specific area of home management or family economics. Prerequisite: Permission of instructor.

HME 4940 Career Traineeship in Management (5-10)
Community based, supervised practical experience in observing and providing helping experience to persons with special management problems such as the elderly, the handicapped and/or those with limited resources. Prerequisites: COA 3130, COA 3410, HME 4230, or equivalent.

HME 5225 Problems of Home Management in Contemporary Society (5)
Influence of diversified cultural impact on management life styles, with emphasis on problems of management of resources. Discussion of problems related to one parent homes, retirement, poverty, death, working parents, migrant families, and other human situations. Prerequisites: COA 3410, HME 4230, or instructor's approval.

HME 5250/EEX 5771 Independent Living for the Handicapped (5)
Explores the special home and personal living skills required in order for persons with mental and physical limitations to achieve their maximum independence. Suitable for students in psyco-educational services, health, physical education and recreation, social work, home economics or anyone planning to work with the elderly or handicapped. Approved for certification for teachers of the mentally retarded.

HME 5450 Workshop in Home Management and Family Economics (1-5)
Short term study of special facets, issues nd trends of home management and family economics.

Apparel Manufacturing Management Certificate Program

Director: **Adele Smith** (*Home Economics*)
Coordinating Committee:
Gabriel Aurioles (*Industrial Systems*), *and* **Betty Morrow** (*Home Economics*).

LOCATION: Tamiami Campus only

The University does not presently offer an undergraduate degree in Apparel Management, but does provide a Professional Certificate acknowledging that students have developed manufacturing management competencies specifically related to the apparel industry. This certificate is primarily designed to meet the needs of those presently employed in the apparel industry who desire the management skills necessary for career effectiveness and mobility. The courses are planned and taught under the guidance of an advisory committee of local leaders in the apparel industry.

A Certificate in Apparel Manufacturing Management will be awarded upon satisfactory completion of thirty credits as listed in the Certificate requirements. These courses may be taken by Special Students with the advice of the Certificate Program Director. Students should complete an application form at the time of their first course registration.

Course Descriptions

Definition of Prefixes
CTE–Clothing and Textiles; ETI–Engineering Technology: Industrial

Required Courses:

Remarks: It is recommended that the courses be completed in the order listed.

CTE 3742L Pattern and Grading Analysis (5)
The theory, geometric principles, and methods of pattern making for apparel and allied products. The student develops complete sets of industrial patterns, including grading in accordance with accepted size ranges and specifications.

CTE 3762L Cutting Analysis and Material Utilization (5)
Principles and methods of cutting raw materials used in apparel products, including fabric inspection, scaling, marking, spreading, cutting, costing, and quality control. Principles of miniature marking and material utilization are also presented.

CTE 3763L Machine Evaluation and Selection (5)
Study of thread, needles, stitch and seam formation as it relates to apparel products. Presents a survey of industrial sewing and pressing equipment and attachments. Cost considerations and payback periods are also examined.

ETI 4613 Methods Analysis (5)
Methods engineering and measurement of human work systems. Techniques for operation analysis, work measurement, and work sampling. Predetermined motion-time systems and standard data development are explored.

CTE 4764 Industrial Apparel Assembly and Quality Control (5)
Analysis of the theory and methods of the assembly of apparel and allied products. Several apparel products are evaluated to determine construction sequence, machinery requirements, cost control, and quality specifications.

CTE 4765 Apparel Production Planning and Costing (5)
Integrates all phases of apparel production by planning the best production cycle for an apparel item from receipt of raw materials to finished product. Topics include pay systems, work-in-process control, production scheduling and costing techniques. Prerequisites for Apparel Manufacturing majors: ETI 4603 and CTE 4764.

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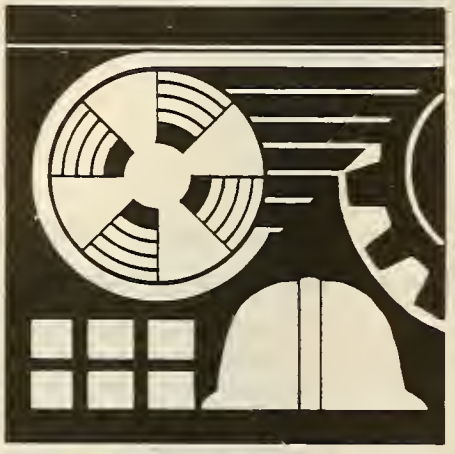
Industrial Systems



Industrial Systems Department

Gabriel G. Aurioles, *Associate Professor and Chairperson*
Sybil de Groot, *Associate Professor*
Jesse R. Fairbanks, *Associate Professor*
Donald F. Wallace, *Associate Professor*
Evodio Llevada, *Assistant Professor*
Neil M. Hout-Cooper, *Assistant Professor*
Katherine E. West, *Assistant Professor*
John Remington, *Assistant Professor*
Margaret G. Wilson, *Assistant Professor*
Andrew R. Banks, *Instructor*

Industrial Technology

The individual who wishes to acquire a technical supervision and management background which emphasizes industrial operations will be served by the Industrial Technology major. Each Industrial Technology major is enrolled as a department major and receives an individual program of study. By careful planning, and the application of courses available in the School and elsewhere in the University, it is possible to provide for specialization which responds to the needs of a wide variety of industrial and commercial enterprises.

Industrial Technology is defined as a profession in which an understanding of the technical terminology of industry provides a capability of performing technical liaison between management, engineer, scientist, technician, craftsman and customer. The work of the industrial technologist has some characteristics of Engineering Technology and many of the qualities associated with management.

The objectives of the department are: to develop an understanding of the technical aspects of industry; to become familiar with terminology used in industry and business; to develop supervisory skills involving specialized knowledge, analytical ability and management tools; to develop leadership skills; to effect individual judgment and initiative; to establish effective communications with scientists, managers, engineers, customers and workers.

LOCATION: Tamiami Campus only

DEGREE: *Bachelor of Science* or *Bachelor of Technology*

LOWER DIVISION PREPARATION: Students must have completed a community college associate's program or attained junior standing at a four-year college. Lower-division courses should be selected in the field for which upper-division specialization is desired. In general, the individual's upper-division program is structured to complement lower-division preparation rather than supplement it. For example, the preparation listed below, or equivalent, is expected for typical upper-division Industrial Systems programs of study:

Typical Upper-Level Specialization	Typical Lower-Division Preparation
Industrial Operations	Engineering Technology
	Industrial Technology
	Business Management
Aviation	Air Traffic Control
	Aviation (Pilot)
	Aviation Administration
Food Technology	
Industrial Systems	Pre-Engineering
Industrial Safety	Engineering Technology
Labor Relations	Pre-Engineering
Production and Manufacturing	Industrial Arts

A major characteristic of the Industrial Systems Department is individual evaluation and curriculum planning. Consequently, prospective students are urged to consult an advisor to discuss their objectives and academic preparation.

	Quarter Hours
Major Requirements and Electives	**90 (Minimum)**

The student must complete a planned individual program of study, including a coherent specialization, which is approved by an advisor and the School of Technology. The program must satisfy the objectives of the Industrial Systems Department, the career objectives of the study, and the general requirements for a bachelor's degree from the School of Technology.

To receive a B.S. degree, as opposed to a B.T., the student must have completed in his four year program at least one upper division course in each of the following areas: Higher Mathematics, Computer Science, Personnel Administration, and Engineering Economy. According to the specialization, other core courses are required.

Professional Certificate Programs

Industrial Safety

The objective of the Professional Certificate Program in Industrial Safety is to present an integrated learning experience that will provide the student with a minimum level of expertise in the specialized area of Occupational Safety. Particular emphasis will be placed on application, interpretation and administration of the Federal Occupational Safety and Health Act and other regulations in an industrial setting. The program is intended to provide skills which will be directly applied in industry.

The Certificate will be awarded to any student who successfully completes the following 30-credit program, or equivalent:

ETI 3700	Safety in Industry	5
BCN 3730	Construction Safety	5
ETI 4708	Health Hazards in Industry	5
HES 4432	Safety Management	5
ETI 4632	Personnel Relations	5
ETI 4681	Industrial Supervision	5

Industrial and Labor Relations

The objective of the Professional Certificate Program in Industrial and Labor Relations is to provide students desiring to pursue professional work in the fields of industrial and labor relations and labor studies with a flexible course of study. The program has been designed to provide options to both baccalaureate degree seeking students and pre and post baccalaureate students in the fields of labor studies, industrial personnel operations, collective bargaining and labor-management relations.

The Certificate will be awarded to any student who successfully completes the following program of 20 required and 10 elective credits, or their equivalent.

ETI 4633	Introduction to Labor Studies	5
BCN 4741	Industrial and Labor Relations Law	5
ETI 4632	Personnel Relations	5
ETI 4905	Independent Study (Field Project)	5

Elective: (Any 2)

ETI 4635	Administration of Labor Organizations	5
ETI 4634	Labor and Industrial Dispute Resolution	5
ETI 3700	Safety in Industry	5
ECP 4203	Labor Economics	5
MAN 4410	Labor, Management, and Collective Bargaining	5
SOC 5261	Industrial Sociology	5

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Industrial Systems

Food Technology

Director: G. Aurioles (Industrial Systems)
Coordinating Committee: A. Kahn (Dietetics and Nutrition), L. Cuervo (Biological Sciences)

The food industry ranks first in Florida in terms of total employment and is always expanding to new products. The field of the food technologist is broad and covers the purchase of fresh product of good quality, provision of subsequent adequate storage, proper processing, packaging, distribution to commercial outlets, and insurance of suitable shelf-life so that the product reaches the consumer with the taste, color and texture of freshly prepared foods. Feeding a growing population is a main concern of all the developing countries and the demand for food technologists abroad gives an international dimension to the program offered at Florida International University.

The Certificate will be awarded to any student who successfully completes the following 30 credit hour program, or equivalent:

FOS 4041	Food Science	4
FOS 4411	Food Engineering	5
FOS 4421	Food Processing I	5
FOS 4422	Food Processing II	5
HUN 3017	Nutrition for Food Technologists	4
MCB 3000	Introductory Microbiology	5
MCB 3000L	Introductory Microbiology Laboratory	2

Production and Manufacturing

The objective of the Professional Certificate Program in Production and Manufacturing is to provide students desiring professional work in the field of Production and Manufacturing with a sequence of courses which will update those students already employed and will satisfy local industry's need for technologically skilled individuals in Production and Manufacturing. The Certificate includes a core of courses designed to give the student knowledge of processes, cost, planning and control in addition to electives in specialized subjects.

The Certificate will be awarded to any student who successfully completes the following program of 20 required credit hours and 10 elective credit hours, or equivalent, with a grade of "C" or better:

ETI 3411	Manufacturing Processes	5
ETI 4671	Engineering Economy	5
ETI 3645	Production Planning and Control I	5
ETI 3646	Production Planning and Control II	5

Electives: (Any 2)

STA 4664	Statistical Quality Control	5
ETI 3110	Quality Control	5
ETI 3444	Automation	5
ETI 3661	Plant Layout	5
ETI 4660	Materials Handling	5
ETI 4650	Industrial Information Systems	5
ETI 4683	Human Factors Engineering	5
ETI 4613	Methods Analysis	5

INDUSTRIAL SYSTEMS

Definition of Prefixes

ARV–Arts: Vocational; BCN–Building Construction; ETC-Engineering Tech.: Civil; ETD–Engineering Tech.: Drafting; ETE–Engineering Tech.: Electrical; ETG-Engineering Tech.: General; ETI-Engineering Tech.: Industrial; ETM-Engineering Tech.: Mechanical; FOS-Food Sciences; HES–Health, Education & Safety; OTH-Occupational Therapy; STA–Statistics.

ARV 3210C Reprographics (5)
Laboratory experiences in the theory and practice of communicating through graphics; includes experiences in copywriting, editing, image generation, image assembly, photo conversion, image carrier preparation, transfer, and finishing.

ARV 4150 Photographics (5)
Laboratory experiences in the theory and practice of photography as used in visual communications. Develops proficiencies in camera work, developing, and printing.

ARV 4250 Planographic Processes (5)
Laboratory experiences in the theory and practice of offset lithography. Emphasis will be directed toward skill development in design and copy preparation, process photography, stripping, platemaking, and duplicator operation.

BCN 3702C Construction Technology (5)
Laboratory experiences of basic production, management and personnel practices as they relate to construction systems and projects.

BCN 3730 Construction Safety (5)
Introduces occupational safety hazards associated with the construction industry. Emphasis placed on recognition, evaluation and control of safety hazards particularly as they relate to the Occupational Safety and Health Act.

BCN 4033L Industrial Research and Development (5)
Laboratory experiences in formulating, researching, designing, and developing prototypes of constructed and manufactured products and processes. Prerequisite: BCN 3702 or ETI 3417C.

BCN 4251C Architectural Drafting (5)
Laboratory experiences in designing structures, developing working drawings and specifications for constructed projects. Includes development of site, foundation, floor, elevations, plumbing plans, and specifications.

ETC 4252L Construction Processes (5)
Laboratory experiences in the principles and practices of the construction trades. Includes concrete and plaster trades, electrical, plumbing, carpentry, iron work, sheetmetal, roof and finishing trades in setting foundations, erecting structures, installing mechanical and electrical systems, applying surface material and finishing.

ETD 4525C Drafting I (5)
Laboratory experiences in the principles and practice of idea development and expression through free hand sketching and conventional instrument drafting. A beginning course for students with no prior drafting experience.

ETC 4526C Drafting II (5)
Laboratory experiences in the principles and practices of product design and communication. Includes conventions, projections, and dimensions and problems of making drawings for product production. Prerequisite: ETD 4525C, or equivalent.

ETE 4562 Electrical/Electronic Power Systems (5)
Introductory course designed primarily for the novice in electricity/electronics. Laboratory experience consists of planned activities centered about electrical/electronic instrumentation and power systems.

ETG 3810 New Venture Formation (5)
Introduction to the main issues facing the would-be businessman. Topics include operational, marketing, and financial needs of the new enterprise. Emphasis on matching student's capabilities with specific project. Open to all F.I.U. students.

ETG 3949 Cooperative Education Technology (5)
Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the Co-op program with consent of advisor. Evaluation and reports required.

(Continued)

Industrial Systems

ETG 4811 Technological Entrepreneurship (5)
A project oriented course designed specifically for those students or members of the community who wish to start a new business venture. Completion of the course requires an actual business start, spin-off or expansion of an existing one.

ETG 4815 Inventions and Innovations (5)
Introduction to the innovation process. Specifically designed for students or members of the community interested in patenting and invention or developing an idea. Exploration and design are encouraged. Topics include patent application, licenses and business plans.

ETG 4949 Cooperative Education Technology (5)
Supervised full-time work quarter for technology cooperative education students. Limited to students admitted to the Co-op program with consent of advisor. Evaluation and reports required.

ETI 3110 Quality Control (5)
Modern concepts for managing the quality function of industry to maximize customer satisfaction at minimum quality cost. The economics of quality, process control, organization, quality improvement, and vendor quality.

ETI 3417C Manufacturing Technology (5)
Laboratory experiences of basic manufacturing, management, personnel, and production practices as they relate to products and processes. Safety procedures.

ETI 3444 Automation (5)
A study of the technology of automation including the economics of management policies for the major industrial changes influencing automation planning.

ETI 3603 Industrial Operations (5)
The industrial structure is studied to see how the various areas and functions are related to each other. The material covered should give the student an overview of the operations of the organization and an understanding of the fundamental principles of management which lead toward effective coordination and control.

ETI 3645 Production Planning and Control I (5)
Introduction to production planning and control concepts including their function within total planning, forecasting, estimating, processing instructions, and manpower allocations. Prerequisite: MAN 3504, or equivalent.

ETI 3646 Production Planning and Control II (5)
The functions of a production planning and control organization at work. Topics in the area of inventory control, scheduling, dispatching and flow control.

ETI 3661 Plant Layout (5)
To effect the coordination of the physical plant facilities to combine the men, materials and machines necessary for operation in the most economical arrangement.

ETI 3670 Industrial Financial Decisions (5)
The accounting process and use of financial techniques and data in planning, controlling, and coordinating industrial activities. This course is intended to familiarize the student with accounting concepts, analytical methods, and use of accounting information for purposes of operation and control.

ETI 3682 Applied Synecology (5)
A systematized approach to the definition and solution of industrial problems resulting from human interactions. This course provides a uniform methodology for resolving one of a manager's most time consuming and frustrating tasks, resolution of people problems. No theory or explanation of human behavior is involved.

ETI 3700 Safety in Industry (5)
Introduces occupational safety and health hazards associated with mechanical systems, materials handling, electrical systems, and chemical processes. Illustrates controls through engineering revision, safeguarding and personal protective equipment. Emphasis placed on recognition, evaluation and control of occupational safety and health hazards.

ETI 4421C Materials Processing (5)
Laboratory experiences in the principles and practices of separating, forming, and combining techniques to produce components, subassemblies, assemblies and finished products. Includes a variety of materials, equipment and fabrication techniques.

ETI 4452 Maintenance Planning (5)
A study of the maintenance function in the industrial setting, including the planning and implementation of preventative maintenance techniques.

ETI 4613 Methods Analysis (5)
Methods engineering and measurement of human work systems. Techniques for operation analysis, work measurement, and work sampling. Predetermined motion-time systems and standard data development are explored. Prerequisite: MAN 3504. Prerequisite or corequisite: Statistics.

ETI 4613 Methods Analysis (5)
Analysis and design of improved methods. Procedures to utilize resources optimally by time standardization, work measurement, flow and operation analysis, activity sampling, predetermined motion time systems, work simplification and job enrichment principles.

ETI 4620 Value Analysis (5)
How to increase the value of products or services by holding quality while reducing costs, holding costs while increasing quality, or both, with emphasis on material shortages. Specific steps of value analysis used to improve industrial problem solving.

ETI 4632 Personnel Relations (5)
A study of the functions of personnel relations. Topics covered include determining job requirements, manpower requirements, selection, interviewing and counseling, tests, training, morale and motivation, job evaluation, wage classification, merit rating, and union-management relations.

ETI 4633 Introduction to Labor Studies (5)
History and development of the labor movement, with emphasis on union development as a response to industrialization and technological change. Includes the structure and functioning of modern unions, the development of modern technology, the industrial working class, and the impact of the rural-urban shift of labor.

ETI 4634 Labor and Industrial Resolution (5)
Theory and practice of dispute resolution in industry arbitration processes, grievances, mediation, factfinding and conciliation. Arbitration of industrial claims and disputes, commercial arbitration. Prerequisite: ETI 4633, or equivalent.

ETI 4635 Administration of Labor Organizations (5)
Administration of labor organizations; labor policies and practices; legal requirements and financial administration of unions. Prerequisite: ETI 4633 or equivalent.

ETI 4650 Industrial Information Systems (5)
Introduction to systems concepts. Planning design and implementation of information systems, decision-making with systems, and system organization.

ETI 4660 Materials Handling (5)
A survey of materials handling elements, the unit load, packaging, bulk handling, and the economics of materials handling. Improvement of

(Continued)

Medical Records Administration

existing handling methods, justification for handling equipment, special handling techniques, and the management of the materials handling divisions in the industrial organization.

ETI 4671 Engineering Economy (5)
The study of the economics of decision-making in business and industry. Includes an analysis of the concepts of break-even, least cost and the differences between alternatives when related to the time value of money. Budgeting, labor and cost control, relative to the industrial engineering technologist, is also considered.

ETI 4681 Industrial Supervision (5)
Overview of the supervisor's functions, responsibility, and over-all role in management in industry.

ETI 4683 Human Factors Engineering (5)
Examination of the ways to fit jobs and objects better to the nature and capacity of the human being. Lectures will review man's performance capability, singly and in groups, in interacting with his work environment. Stresses the practical application of human factors principles.

ETI 4690 Industrial Sales (5)
Fundamentals of technical sales. Analysis of buyer's needs. Experiments, trial runs and demonstrations. The sale of machinery, raw materials and technical services. Credit and financing considerations. Measures of performance. Case studies.

ETI 4691 Women in Industry (5)
Development of supervisory and technical skills for women in industrial operations. Practice in planning, organizing, decision-making, and employee direction, with particular emphasis on the woman as supervisor, manager or in the technical professions.

ETI 4708 Health Hazards in Industry (5)
A continuation of Safety in Industry. An introduction to OSHA regulations on health hazards. Noise, radiation and dust problems in the industry. Special hazards with solvents, asbestos, lead, silica, and other chemicals. OSHA compliance procedures. Prerequisite: ETI 3700.

ETI 4905 Independent Study (1-5)
Specialized intensive study in an area of special interest to the student. Consent of faculty instructor required.

ETI 4930 Special Topics (5)
For a group of students who wish intensive study of a topic not otherwise offered in the University. Consent of faculty supervisor and department chairperson required.

ETM 4407L Mechanical Power Systems I (5)
Laboratory experiences in the theory of operation and related maintenance of single and multiple cylinder reciprocating engines. Includes introductory experience with mechanical, fluid, and pneumatic power systems.

ETM 4408L Mechanical Power Systems II (5)
Advanced laboratory experiences with reciprocating engines. Introductory study of turbine, diesel, and rotary engines. Introductory study of aircraft structures and basic aerodynamics. Prerequisite: ETM 4407, or equivalent.

ETM 4823C Materials of Industry (5)
Laboratory experiences in the theory and practice of characteristics of materials of industry. Includes test and measurement of stress, strain, torsion, tensile strength, fatigue, and hardness of metals, wood, fabrics, ceramics and synthetics.

FOS 4411 Food Engineering (5)
Engineering concepts applied to food processing. Material and energy balance. Basic unit operations used in food processing to include fluid flow, mass and heat transfer. Specific applications and problems.

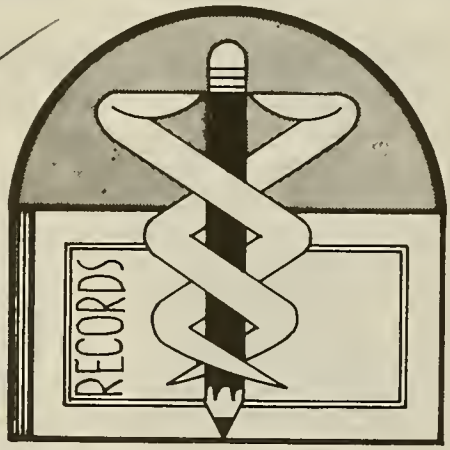
FOS 4421C Food Processing I (5)
Basic principles of food preservation from raw material to storage stability of finished products. Quality assurance and new product development.

FOS 4422C Food Processing II (5)
Role of additives in food processing. Packaging materials. Principles of distribution and marketing. Plant site location. Field trips and case studies.

HES 4432 Safety Management (5)
Basic concepts of safety management. Fundamentals of loss control, policies, accountability, measurement and appraisal of the safety function in industry. The technique of operations review. Systems safety. Motivation. Products Safety. Case studies. Prerequisites: BCN 3730 and ETI 4708, or equivalent.

OTH 3123 Technology for Occupational Therapy (5)
The basic properties of woods and metals and the techniques used by occupational therapists in planning a project based on a hypothetical patient's problem.

STA 4605 Applied Systems Research (5)
Basic industrial research techniques, operational production problems, matrix applications, inventory control, network analysis. Prerequisites: STA 3161 (or equivalent), MAS 3103.



Medical Records Administration Major

Florence C. Amato, R.R.A., Ph.D., *Associate Professor and Director*
Helen B. Glidden, R.R.A., M.A., *Assistant Professor*

The major in Medical Records Administration provides the student with management skills necessary for key members of the modern health care team, contributing to serving the health care needs of individuals and of the community. This is accomplished through development of patient information systems which enable patients to be cared for adequately, medicine to be taught, research to be conducted, epidemics to be controlled, drugs to be tested, and health care statistics to be compared. Specific skills include those needed for acquisition of complete medical data on each patient cared for by the medical team, for planning of systems for record retention and retrieval, and for management of those systems by the departmental staff.

The Program was approved by the AMA–AMRA in April, 1979, thus making graduates from the program eligible to take the National Registry to become Registered Record Administrators.

DEGREE: *Bachelor of Science, in Medical Records Administration*

Required Courses: Anatomy and Physiology including Laboratory, Chemistry and Microbiology.

Remarks: A person intending to enter the program must take Anatomy and Physiology prior to admission; Chemistry and Microbiology may be taken at FIU concurrently with other courses in the program.

UPPER DIVISION PROGRAM:

		Quarter Hours
Major Required Courses:		48
MRE 3001	Medical Terminology	2
MRE 3001L	Medical Terminology, Laboratory	1
MRE 3110	Medical Records Administration I	3

(Continued)

Medical Records Administration

MRE 3110L	Medical Records Administration I, Laboratory	1
MRE 3401	Fundamentals of Medical Science	4
MRE 3800	Directed Practice I	2
MRE 3202C	Coding and Indexing Procs	4
MRE 3205	Medical Records Administration II	3
MRE 3205L	Medical Records Administration II, Laboratory	1
MRE 3402	Fundamentals of Medical Science II	4
MRE 3403	Fundamentals of Medical Science III	4
MRE 3810	Directed Practice II	2
MRE 4410	Medical Records Administration III	3
MRE 4410L	Medical Records Administration III, Laboratory	1
MRE 4831	Directed Practice III	1
MRE 4312	Medical Records Administration IV	3
MRE 4312L	Medical Records Administration IV, Laboratory	1
MRE 4830	Directed Practice IV	1
MRE 4304	Problems in Medical Records Administration	2
MRE 4835	Internship Medical Records Management	5
Support Courses:		42

MLS 4120: HCA 3120, 3501, 4203, 4511, 4710: COP 3172: CIS 3300: STA 3013

TOTAL 90

Course Descriptions

MRE 3001 Medical Terminology (2)
Provides the student with basic medical language skills, including pronunciation, spelling, and definitions necessary for communication in the medical world.

MRE 3001L Medical Terminology Laboratory (1)
Laboratory to accompany, HSC 3531. Comprehension in transcription of medical records, including history and physical reports, x-ray, operative, and pathology reports.

MRE 3110 Medical Records Administration I (3)
Introduces the student to the historical development of medical record science. Role and function of the medical records administrator. Professional ethics. Flow of the medical record from patient admission to completion of the record after discharge. Numbering and filing systems. The medical record: content and format, value and standards for health care facilities.

MRE 3110L Medical Records Administration I, Laboratory (1)
Laboratory to accompany MRE 3110. Competency: Setting up filing systems in health care facilities. Organization and analysis of traditional and problem-oriented medical records to meet standards of JCAH, AOA, Medicare and Medicaid.

MRE 3202C Coding and Indexing Procedures (4)
Special registries: nomenclatures, coding and indexing; ICD–9–CM; Application of indices to research.

MRE 3205 Medical Records Administration II (3)
Presents an in-depth study of hospital statistics. Covers sources, definitions, collection, and reporting of data in the medical records department of health care facilities and legal administration.

MRE 3205L Medical Records Administration II, Laboratory (1)
Laboratory to accompany MRE 3205. Competency: Retrieval of medical data. Developing data collection systems. Completing reports and analyzing data for administrative uses and legal procedures.

MRE 3401 Fundamentals of Medical Science I (4)
A systematic review of organ systems, arranged by medical specialties. Typical chart data will be included, with representative information characteristic of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are internal medicine, pediatrics, obstetrics and gynecology.

MRE 3402 Fundamentals of Medical Science II (4)
A systematic review of organ systems, arranged by medical specialties. Typical chart data will be included, with representative information characteristics of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are general surgery, neurosurgery, nurology, and orthopedics.

MRE 3403 Fundamentals of Medical Science III (4)
A systematic review of organ systems, arranged by medical specialties. Typical chart data will be included, with representative information characteristic of history and physical examination, laboratory, x-ray data, and nursing notes. Specialties covered are endocrinology, otorhinolaryngology, opthalmology, oncology, genetics and anesthesiology.

MRE 3800 Directed Practice I (2)
Orientation of the student to the hospital medical records department and adjunct diagnostic or therapeutic units, including the outpatient department, emergency room, admitting office, x-ray, pharmacy, physical therapy, laboratory, and pathology department.

MRE 3810 Directed Practice II (2)
Orientation of the student to medical records department functions. Rotation of the student through technical functions of the department, following the flow of the patient's record after discharge. Includes the discharge procedure; analysis, coding and indexing systems; statistical reporting; correspondence; control of the incomplete medical record; and processing of the completed record.

MRE 4410 Medical Records Administration III (3)
Medical care evaluation, including organizational structures, methods and procedures in compliance with the Joint Commission on Accreditation of Hospitals, AOA, Medicare and PSRO.

MRE 4410L Medical Records Administration III, Laboratory (1)
Competency: Abstracting of medical data to meet criteria. Analyzing criteria. Setting up utilization plans and procedures. Medical research design.

MRE 4304 Problems in Medical Records Administration (2)
Through illustrative case reports, group discussions, role playing, oral reports, lectures, buzz sessions, and review of the literature, students explore effective methods for identifying and arriving at satisfactory solutions to specific types of problems they may expect to encounter in the administration of medical record services.

MRE 4312 Medical Records Administration IV (3)
Management of a medical records system in any type of health care facility, including hospital and ancillary records, nursing care facilities, clinics and HMO: planning, organizing, controlling and actuating.

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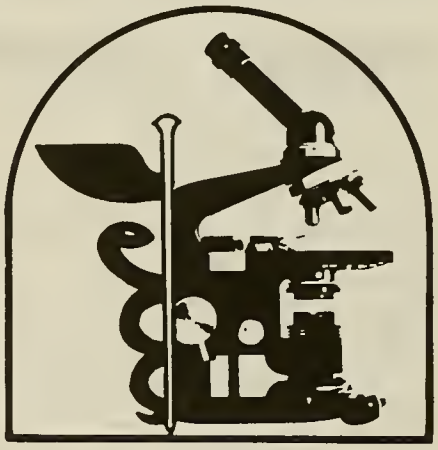
Medical Technology



MRE 4312L Medical Records Administration IV, Laboratory (1)
Competency: Experience in planning physical layouts, purchase of equipment, writing of proposals, and cost justifications. Development and analysis of policies, procedures, and work flow. Evaluation of budgets. Development of job descriptions and use of personnel evaluation techniques.

MRE 4830 Directed Practice IV (1)
Observation of the management of a hospital medical records department, with emphasis on administrative and medical staff relationships, including policy and procedure manuals, job descriptions and evaluation, budgeting and cost controls, and medical staff committees.

MRE 4831 Directed Practice III (1)
Orientation of the student to medical record-keeping, filing and retrieval systems of neighborhood clinics, nursing care facilities, and specialized institutions including psychiatric and rehabilitative facilities. The last five weeks of this directed practice centers on utilization review procedures for hospitals and nursing care facilities.

MRE 4835 Internship in Medical Records Management (5)
Management in a medical records department for five weeks, under the supervision of a Registered Record Administrator.

Medical Technology

Margaret Waid, *Professor and Chairperson*
Sylvia L. Smith, *Associate Professor*
Janet L. Zins, *Associate Professor*
Frank A. Seedarnee, *Assistant Professor*
Joyce T. Robinson, *Assistant Professor*

The program offered by the Department provides opportunities for the student to learn the scientific principles which are basic to the development, performance, evaluation, and control of laboratory tests by the medical technologist in health evaluations and patient management.

The program is approved by the National Accrediting Agency of Clinical Laboratory Sciences, the American Medical Association, and the American Society of Clinical Pathologists. A graduate of the program is eligible to apply for examination and certification by the Registry of Medical Technologists as a M.T. (A.S.C.P.), and for licensure as a Technologist by the state of Florida.

LOCATION: Tamiami Campus only.

DEGREE: *Bachelor of Science in Medical Technology*

LOWER DIVISION PREPARATION:
The student seeking admission to the program should have: (1) completed 90 quarter hours (60 semester hours) in an accredited two or four year institution; (2) completed all of the general education requirements; (3) earned a cumulative grade point average of 2.5 (on a scale of 4.0); (4) received a minimum of a "C" grade in each required science course; and (5) completed the following preparatory courses: two semesters of biology with laboratory, two to three semesters of general chemistry with laboratory, two semesters of organic chemistry with laboratory, two semesters of physics with laboratory, and two semesters of pre-calculus mathematics (college algebra and trigonometry). (Survey courses in science and mathematics are not accepted.)

UPPER DIVISION PROGRAM:
The following courses must be completed *prior* to completion of the medical technology program, and may either precede, or be taken concurrently, with specific phases of the program: general microbiology including laboratory, quantitative analysis including laboratory; immunology; biochemistry (laboratory is elective).

Alternate laboratory experience or proficiency testing may be arranged on an individual basis for: (i) graduates of NAACLS–approved MLT programs; (ii) students certified as MLT (ASCP); (iii) students who have had experience in a clinical laboratory; (iv) students who have had military laboratory training.

The medical technology lectures and hospital practicum are required of all students who complete the program.

The program is capped at thirty students. One class of students is admitted each year to begin the program in the fall quarter. Applications for admission to the program and all University applications must be received by the program and the Office of Admissions respectively by February 15th, to be considered for the fall quarter. Candidates for admission will be interviewed by the faculty. The medical technology required courses and hospital practicum are open only to majors in the program, and must be taken in the appropriate sequence. Each co-requisite and pre-requisite for the subsequent related course must be completed with a satisfactory grade before the following related course may be attempted. A minimum grade point average of 2.5 (in two sequential quarters) must be maintained in order for the student to be permitted to remain in the program. Entrance to the senior practicum depends upon satisfactory evaluation of the student's record by the program faculty.

Medical technology community service courses are taught for the continuing education of community clinical laboratory personnel.

		Quarter Hours
Required Courses:		**81–86**
	Junior Year	
Fall Quarter		**14(13)**
MLS 4306	Clinical Hematology	2
MLS 4306L	Clinical Hematology Laboratory	3
or		
MLS 4307L	Directed Study in Hematology	2
MLS 4110	Hematology Correlations	2
MCB 3013	General Microbiology Lectures and Laboratory	7
Winter Quarter		**16(15)**
MLS 4405	Clinical Microbiology	2
MLS 4405L	Clinical Microbiology Laboratory	3
or		
MLS 4406L	Directed Study in Clinical Microbiology	2
MLS 4120	Microbiology Correlations	2
PCB 3233	Immunology	5
MLS 4320C	Advanced Hematology	3
Spring Quarter		**15(14)**
MLS 4535	Blood Banking and Serology	2
MLS 4535L	Blood Banking and Serology Laboratory	3
or		
MLS 4536L	Directed Study in Blood Banking (for M.L.T.)	2
MLS 4130	Clinical Correlations in Blood Banking	2
MLS 3430	Medical Parasitology	2

(Continued)

Medical Technology

MLS 3430L	Medical Parasitology Lab.	1
CHM 3120	Quantitative Analysis (lecture and laboratory)	7
Summer Quarter		
BCH 3033	Biochemistry (lecture only required)	5

Senior Year

Fall Quarter		16(14)
MLS 4625	Clinical Chemistry Methods	4
MLS 4625L	Clinical Chemistry Laboratory	4
or		
MLS 4626L	Directed Study in Clinical Chemistry	2
MLS 4140	Clinical Correlations in Chemistry	2
MLS 4460C	Advanced Microbiology	5
MLS 5934	Seminar I	1
Winter Quarter		12
MLS 4820L	Practicum I	6
MLS 4530C	Advanced Blood Banking	3
MLS 4755C	Laboratory Statistics and Quality Control	2
MLS 5935	Seminar II	1
Spring Quarter		14
MLS 4821L	Practicum II	6
MLS 4630C	Advanced Clinical Chemistry	5
MLS 4700	Medical Laboratory Management	2
MLS 5936	Seminar III	1

Course Descriptions

Definition of Prefixes
MLS–Medical Laboratory Science

MLS 3420L Medical Mycology (2)(F,SS)
Study of the essential procedures and criteria in the identification of pathogenic fungi. Recognition of fungal contaminants commonly encountered in clinical specimens. Actinomycetes. Antimycotic agents. Mycoserology. Stains, reagents and media.

MLS 3430 Medical Parasitology (2)(S)
Classification, morphology and life cycles of medically significant parasites. Emphasis is on microscopic identification, specimen preservation, and infection control.

MLS 3430L Medical Parasitology Laboratory (1)(S)
Laboratory to accompany MLS 3430.

MLS 3700 Management Procedures for Laboratory Employees (2)(SS)
Job descriptions, salary schedules, equipment and reagent purchasing, quality assurance programs, work-load recording methods. Individualized projects adapted to meet the needs of facility where student is employed. Prerequisite: one year of clinical laboratory experience.

MLS 3750 Laboratory Quality Control, Safety, and Instrument Maintenance (5)(S)
Course designed for the working technologist who wishes to protect himself, his co-workers, and others in his environment from the hazards inherent in laboratory operations, and who wishes to present better evidence of compliance with the various inspection and accreditation organizations which now inspect laboratories. Prerequisite: one year of clinical laboratory experience.

MLS 4110 Hematology Correlations (2)(F)
Present diseases associated with abnormal findings in laboratory tests performed in hematology, coagulation, urinalysis, and clinical microscopy. Assist in correlating two or more laboratory procedures which might reinforce the likelihood of specific diseases being identified by laboratory methods.

MLS 4120 Microbiology Correlations (2)(W)
Medical aspects of infections caused by bacterial, viral, rickettsial, and mycotic pathogens. In vivo and in vitro actions of antimicrobials. Hospital infection control.

MLS 4130 Blood Bank and Serology Correlations (2)(S)
Laboratory identification of venereal diseases. Blood Bank regulations in protection of donor and recipient. Blood component therapy selection for specific conditions. Problems of the patient immunized through transfusion therapy.

MLS 4140C Clinical Chemistry Correlations (2)(F)
Biochemical tests used in diagnosis and treatment of metabolic disorders. Carbohydrate and protein metabolism, acid-base balance, enzymes, testing for organ function.

MLS 4150 Selected Topics in Clinical Correlations (2)(VAR)
Current topics in Clinical Correlations of particular significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4160L Individualized Study in Clinical Correlations (2–5)(F,W,S,SS)
Introduction to problems in Clinical Correlations requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

MLS 4190 Diagnostic Histology (2)(F)
Control slides; special stains; preparation of tissues for EM; identification of significant tissue features for preparation of surgical slides. For experienced histotechnologists.

MLS 4306C Clinical Hematology (2)(F)
Technical problems involving Hematology, Coagulation, Urinalysis, and Clinical Microscopy. Microscopic identification of normal and abnormal findings. Pitfalls and problems.

MLS 4306L Clinical Hematology Laboratory (3)(F)
Laboratory to accompany MLS-4306.

MLS 4307L Directed Study in Hematology (2)(F)
Selected laboratory techniques to accompany MLS–4306. For M.L.T.'s.

MLS 4320C Advanced Hematology (3)(W)
Study of abnormal blood cells present in peripheral smear and bone marrow. Special tests performed in hematology and coagulation. Hematology automation. Lectures and laboratory.

MLS 4325 Selected Topics in Hematology (2)(VAR)
Current topics in Hematology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4327L Individualized Study in Hematology (2–5)(W,S,SS)
Introduction to problems in Hematology requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

MLS 4405 Clinical Microbiology (2)(W)
Diagnostic microbiological procedures. Study of clinically significant organisms. Isolation media and biochemical tests for identification. Recognition of normal flora. Anaerobic procedures. Viruses, Fungi, Rickettsiae. Serological typing. Antibiotic sensitivity tests. Prerequisite: General Microbiology. Corequisite: Immunology.

MLS 4405L Clinical Microbiology Laboratory (3)(W)
Laboratory to accompany MLS–4405.

MLS 4406L Directed Study in Clinical Microbiology (2)(W)
Selected laboratory techniques to accompany for MLS–4405. For M.L.T.'s

(Continued)

Occupational Therapy

MLS 4460C Advanced Microbiology (5)(F,S)
Lectures and laboratory. Identification of rare pathogens. Virology–tissue culture techniques. Mode of action and bacterial resistance to antibiotics. Fluorescent antibody techniques. Immunodiffussion. Immunoelectrophoresis. Seniors only.

MLS 4465 Selected Topics in Microbiology (2)(VAR)
Current topics in Microbiology of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4467L Individualized Study in Clinical Microbiology (2–5)(F,S,SS)
Introduction to problem in Clinical Microbiology requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

MLS 4530C Advanced Blood Banking (3)(W)
In depth study of Transfusion Therapy, the use and preparation of blood components, and special problems in blood banking. Lectures and laboratory. Seniors only.

MLS 4535 Blood Bank and Serology (2)(S)
Diagnostic serological studies for venereal disease and other infections. Blood grouping and compatibility testing. Irregular antibody techniques. Paternity identification. Transfusion problems associated with pregnancy. Immunology prerequisite.

MLS 4535L Blood Bank and Serology Laboratory (3)(S)
Laboratory to accompany MLS–4535.

MLS 4536L Directed Study in Blood Banking and Serology (2)(S)
Selected laboratory techniques to accompany MLS–4535. For M.L.T.'s

MLS 4551L Individualized Study in Blood Banking (2–5)(F,W,SS)
Introduction to problems in Blood Banking requiring research or independent study. Special work, lecture and/or laboratory as determined by advisor in accord with student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

MLS 4555 Selected Topics in Blood Banking (2)(VAR)
Current topics in Blood Banking of clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the Instructor.

MLS 4625 Clinical Chemistry Methods (4)(F)
Medical laboratory procedures for analysis of carbohydrates, proteins, lipids, enzymes, electrolytes. Renal and liver function profiles. Basic instrumentation. Automated analysis with emphasis on continuous flow. Quality control. Credit for all required chemistry lectures and laboratories except Biochemistry are prerequisite.

MLS 4625L Clinical Chemistry Laboratory (4)(F)
Laboratory to accompany MLS 4625.

MLS 4626L Directed Study in Clinical Chemistry (2)
Selected laboratory techniques to accompany MLS–4625. For M.L.T.'s

MLS 4630C Advanced Chemistry (5)(S)
Lecture and Laboratory. Topics to be covered include analysis of thyroid hormones, estrogens, adrenal hormones and metabolites, radioimmunoassay and radioisotope measurement, amniocentesis, toxicology, multichannel analyzers, and gas chromatography. Seniors only.

MLS 4635 Selected Topics in Clinical Chemistry (2)(VAR)
Current topics in Clinical Chemistry of particular clinical significance. Review of literature and discussion of the selected topics. Prerequisite: Permission of the instructor.

MLS 4637L Individualized Study in Clinical Chemistry (2–5)(W,S,SS)
Introduction to problems in Clinical Chemistry requiring research or independent study. Special work, laboratory and/or lecture as determined by advisor in accord with the student's individual interest. Review of literature. Participation in seminars. Prerequisite: Permission of instructor.

MLS 4700 Laboratory Management (2)(S)
Personnel handling, laboratory records, equipment and reagent purchasing, laboratory computerization, quality assurance programs, workload recording programs, scheduling and methods of laboratory self-evaluation. Seniors only.

MLS 4755C Laboratory Statistics and Quality Control (2)(W)
Lecture. Topics to be covered include basic laboratory statistics, linear regression and correlation analysis, quality control charting techniques, new method evaluation, problem solving using computer programs.

MLS 4820/MLS 4821 Practicum A and B (6)(F,W,S)
Hospital laboratory experience. Two quarters required. Rotation arranged to include 2 to 3 weeks in each of nine departments. Departmental rotation modified for students with life experience to meet needs or special interest. Rotation will be arranged through the hospital laboratory director and MDT education coordinator. All pre-practicum courses must be completed before admission to hospital rotation.

MLS 5934, 5935, 5936 Seminar I, II, and III (1)(F,W,S)
Three quarters are required. Preparation and presentation of literature review and individualized projects. Instructional methods. Supervisory techniques. Seniors only.

Occupational Therapy

Reba L. Anderson, *Associate Professor and Chairperson*
Suze Dudley, *Assistant Professor*
Karen Bergman, *Assistant Professor*
Shirley Carter, *Assistant Professor*

If you are interested in working with people, helping them to reach their maximum potential, and being of service to people with special problems, perhaps occupational therapy would be the profession in which you could attain these goals.

Occupational therapy is the process of focusing human energies to enhance the quality of life of the individual. Specific techniques are directed towards restoration, reinforcement, and enhancement of participation in life. Focus is on skills and functions essential for adaptation, prevention, and correction, in order to promote and maintain social, physical or mental health. Occupational therapy serves a wide population in a variety of settings such as hospitals and clinics, rehabilitation facilities, long-term care facilities, extended care facilities, sheltered workshops, schools, and community agencies.

The program in occupational therapy is accredited by The American Occupational Therapy Association and The American Medical Association.

In order to be admitted to the program in occupational therapy, applicants must meet the requirements for admission to the Unversity,

(Continued)

Occupational Therapy

have a cumulative G.P.A. of 2.5 or better, and have completed required prerequisites and 90 quarter hours of acceptable academic credit.

LOCATION: Tamiami Campus only.

DEGREE: *Bachelor of Science in Occupational Therapy*

LOWER DIVISION PREPARATION:

Required Courses: Biological Sciences (10 quarter hours) to include 5 hours of Biology with Lab; Social Sciences (20 quarter hours) to include 10 hours of Psychology, 5 hours of Sociology and/or Anthropology; and Statistics (5 quarter hours).*5 quarter hours = 3 semester hours

UPPER DIVISION PROGRAM:

Required Courses:

Junior Year

		Quarter Hours	
Fall Quarter			
OTH 3000	Introduction to Occupational Therapy	3	
OTH 3010	Clinical Orientation for OT	1	
OTH 3120	Therapeutic Media I	5	
OTH 3810	Psychiatric Skills Lab for OT I	1	
PCB 3702	Human Physiology	5	
PHT 3120	Fundamentals of Human Performance	3	
			18
Winter Quarter			
OTH 3121	Therapeutic Media II	5	
OTH 3327	Issues in Psychosocial Dysfunction/OT	4	
PHT 3121	Applied Kinesiology	5	
ZOO 3731	Anatomy for Occupational Therapists	4	
ZOO 3731L	Lab for Anatomy for OT	1	
			19
Spring Quarter			
OTH 3328	Issues in Psychosocial Dysfunction for Occupational Therapists II	4	
OTH 3420	Therapeutic Techniques in Physical Disabilities	2	
OTH 3421	Physical Disability Theory	3	
OTH 3811	Psychiatric Skills Lab for OT II	2	
ZOO 3834	Neuroscience	6	
			17
Summer Quarter			
OTH 3815	Field Work Experience	4	4

Senior Year

Fall Quarter			
OTH 3123	Technology for Occupational Therapists	5	
OTH 3411	Pathology	2	
OTH 4200	Developmental Theory I	3	
OTH 4320	Psychiatric Occupational Therapy Theory	5	
OTH 4812	Psychiatric Skills Lab for OT III	1	
			16
Winter Quarter			
OTH 4210	Developmental Theory II	3	
OTH 4260	Disability Evaluation II	5	
OTH 4321	Psychiatric Occupational Therapy Theory II	5	
OTH 4422	Physical Disability Theory II		
OTH 4813	Psychiatric Skills Lab for OT IV	1	
			18
Spring Quarter			
OTH 4850 or OTH 4851	Field Work Experience	12	12
Summer Quarter			
OTH 4700	Organization and Administration	3	
OTH 4750	Rehabilitation Seminar	3	
OTH 4760	Current Research in Occupational Therapy	3	
OTH 4852	Field Work Experience–or OTH 5905	4	
			13
Fall Quarter			
OTH 4850 or OTH 4851	Field Work Experience	12	12
			129

Course Descriptions

Definition of Prefixes

OTH–Occupational Therapy; PCB–Biological Sciences; PHY–Physical Therapy; ZOO–Biological Sciences.

OTH 3000 Introduction to Occupational Therapy (3)(F)

History and development of the profession. Philosophy of treatment.

OTH 3120 Therapeutic Media I (5)(F)

The study of selected major crafts as therapeutic modalities.

OTH 3121 Therapeutic Media II (5)(W)

The use of minor crafts as therapeutic modalities.

OTH 3327 Issues in Psychosocial Dysfunction for Occupational Therapists I (4)(W)

Basis for understanding occupational therapy as a diagnostic, evaluative and treatment process for mental illness.

OTH 3328 Issues in Psychosocial Dysfunction for Occupational Therapists II (4)(S)

Continuation of OTH 3327.

OTH 3411 Pathology (2)(F)

Brief review of organ systems, and primary diseases that affect each organ, with specific emphasis on the disabilities that would result from such diseases. Prerequisites: Anatomy, physiology.

OTH 3420 Therapeutic Techniques in Physical Disabilities (2)(S)

Upper extremity prosthetic and orthotic devices are investigated. Presentation includes the biomechanics, anatomy, materials and appliances necessary for fabrication, pre- and post-prosthetic and orthotic evaluation, checkout procedures and training methods. Prerequisite: ZOO 3743.

OTH 3421 Physical Disability Theory (3)(S)

The study of occupational therapy as related to physical disabilities. Development and status of current treatment techniques. Lecture and lab. Prerequisites: Anatomy, physiology, kinesiology.

(Continued)

Physical Therapy

OTH 3810 Psychiatric Skills Lab for Occupational Therapy I (1)(F)
An experientially oriented course directed toward helping students become aware of their own intrapersonal and interpersonal processes. Focus is on personal learning. Permission of Instructor.

OTH 3811 Psychiatric Skills Lab for Occupational Therapy II (2)(S)
Continuation of OTH 3810.

OTH 3815 Field Work Experience (4)(SS)
Pre-clinical experience in an approved training center.

OTH 4200 Developmental Theory I (3)(F)
Introduction to developmental disabilities including mental retardation, cerebral palsy and learning disabilities.

OTH 4210 Developmental Theory II (3)(W)
The use of developmental theory in occupational therapy practice.

OTH 4260 Disability Evaluation II (5)(W)
Evaluation procedures in the testing of perceptual-motor dysfunctions. Prerequisites: Anatomy, psysiology, neuroscience. Lecture and lab.

OTH 4320 Psychiatric Occupational Therapy Theory (5)(F)
Theories and approaches to psychological aspects of illness in the rehabilitative process. Lecture and lab.

OTH 4321 Psychiatric Occupational Therapy Theory II (5)(W)
Continuation of OTH 4320. Lecture and lab.

OTH 4422 Physical Disability Theory (4)(W)
Continuation of OTH 3421. Prerequisite: OTH 3421.

OTH 4700 Organization and Administration (3)(SS)
Administrative procedures in planning and operating an occupational therapy treatment program.

OTH 4750 Rehabilitation Seminar (3)(SS)
Research in occupational therapy and related medical fields.

OTH 4760 Current Research in Occupational Therapy (3)(SS)
Introduction to research principles and terminology as applied to occupational therapy.

OTH 4812 Psychiatric Skills Lab for Occupational Therapy III (1)(F)
Continuation of OTH 3811.

OTH 4813 Psychiatric Skills Lab for Occupational Therapy IV (1)(W)
Continuation of OTH 4812.

OTH 4850 Field Work Experience (12)
Three month internship in a physical disabilities treatment center.

OTH 4851 Field Work Experience (12)
Three month internship in a mental health treatment center.

OTH 4852 Field Work Experience (Variable)
Internship in a specialized treatment area.

OTH 5262 Evaluation and Treatment of Perceptual-Motor Dysfunction (1–5)
The study of specific evaluation tools, and developing treatment procedures directly related to these tests.

OTH 5329 Current Trends in Mental Health as Related to Occupational Therapy Practice (1–5)
Specialized study of specific treatment theories and the application of these theories to clinical practice.

OTH 5600 The Study of Gerontology as Related to Occupational Therapy Practice (1–5)
A study of the impact of advances in the field of gerontology, and current legislation affecting the profession.

OTH 5760 Current Research in Occupational Therapy (1–5)
Review of statistical concepts and research procedures in the clinical setting, with in-depth study of the current status of research in occupational therapy.

OTH 5905 Independent Study (Variable)

Physical Therapy

Roger C. Skovly, *Associate Professor and Chairperson*
Burton J. Dunevitz, *Associate Professor*
Terry W. Higgins, *Assistant Professor*
Awilda R. Haskins, *Assistant Professor*

Accredited by the American Physical Therapy Association, the program emphasizes a progressive, student centered approach to educating physical therapists. Students progress through a variety of learning experiences designed to develop their evaluation and applied therapeutic skills in treating musculoskeletal, neurological, cardiovascular, and pulmonary disorders.

The Physical Therapy program is community-centered, utilizing clinical physical therapists, medical physicians and other allied medical professionals to complement the teaching efforts of regular faculty.

Graduates of the program are prepared to assume positions in a variety of settings, such as general hospitals, rehabilitation centers, private clinics, home health care facilities, school systems, student health and sports medicine centers. Many physical therapists are self employed.

Students applying to the program must meet general education requirements, and apply both to the University and the physical therapy program. Enrollment is limited, admission is selective, and acceptance to the University does not assure entrance to the Physical Therapy program. Deadline for receiving applications is December 31. One class is selected each academic year in April to commence course work in September.

LOCATION: Tamiami Campus only.

DEGREE: *Bachelor of Science in Physical Therapy*

LOWER DIVISION PREPARATION:

Required Courses: at least 90 quarter hours (60 semester hours) of acceptable college credit; at least one academic year of science coursework (with laboratory) in the area of biology or zool-

(Continued)

Physical Therapy

ogy, chemistry and physics; one year of psychology; a minimum grade average of 2.85 in the above required coursework; a minimum 2.75 overall GPA.

UPPER DIVISION PROGRAM:

		Quarter Hours
Required Courses:		118–123
	Junior Year	
Fall Quarter		19
PCB 3703	Human Physiology I	4
PCB 3703L	Human Physiology Lab I	1
PHT 3001	Introduction to Physical Therapy	1
PHT 3122	Kinesiology I	4
PHT 3201L	Basic Therapeutic Skills I	3
ZOO 3733	Human Gross Anatomy I	4
ZOO 3733L	Human Gross Anatomy Lab I	2
Winter Quarter		18
PCB 3704	Human Physiology II	4
PCB 3704L	Human Physiology Lab II	1
PHT 3123	Kinesiology II	3
PHT 3202	Basic Therapeutic Skills II	4
ZOO 3734	Human Gross Anatomy II	4
ZOO 3734L	Human Gross Anatomy LAB II	2
Spring Quarter		20
PHT 3133C	Musculoskeletal Evaluation and Lab	6
PHT 3300	Physical Therapy and Human Disorders	4
PHT 3803	Clinical Clerkship I	3
ZOO 3743	Neuroscience	5
ZOO 3743L	Neuroscience Lab	2
Summer Quarter		16
PHT 3231	Rehabilitation	3
PHT 3232C	Prosthetics and Orthotics	3
PHT 3310	Orthopedic Surgery	4
PHT 3311	Clinical Orthopedics	3
PHT 3812	Clinical Clerkship II	3
	Senior Year	
Fall Quarter		16
PHT 3400	Emotional Aspects of Physical Disability	2
PHT 4141	Evaulation of the Developing Child	3
PHT 4235C	Electrodiagnosis	3
PHT 4312	Neurology	3
PHT 4313	Clinical Neurology	2
PHT 4822	Clinical Clerkship III	3
Winter Quarter		16
PHT 4823	Clinical Clerkship IV	3
PHT 4234C	Neurophysiologic Techniques	6
PHT 4510	Organization and Administration	5
PHT 4932	Research Methods and Design	2
Spring Quarter		12
PHT 4824	Clinical Internship	12
PHT 4905	Independent Study	(1–6)
Summer Quarter		3
PHT 4825	Clinical Internship	3

Course Descriptions

Definition of Prefixes
PCB–Biological Sciences; PHT–Physical Therapy; ZOO–Biological Sciences.

PHT 3001 Introduction to Physical Therapy (1)(F)
A survey course of the present status of physical therapy as a health care profession.

PHT 3121 Applied Kinesiology (5)(W)
A course providing learning experiences to develop skills in palpation, goniometry, manual muscle testing and motion analysis of normal subjects. For occupational therapy students.

PHT 3122 Kinesiology I (4)(F)
A study of anatomical, physiological and biomechanical principles as they relate to body movement: coverage of upper extremity.

PHT 3123 Kinesiology II (3)(W)
A study of the biomechanical principles related to the analysis of motion of the trunk, lower extremity, and normal gait.

PHT 3133C Musculoskeletal Evaluation (6)(S)
Laboratory experiences in measuring and recording the physical status of the musculoskeletal system, using the manual means of palpation, movement, muscle strength testing, goniometry, and x-ray. Abnormal gait patterns and posture evaluation will be presented.

PHT 3201L Basic Therapeutic Skills I (3)(F)
A study of the scientific rationale and performance of the basic skills of vital signs, massage, transfer techniques, and gait training in a lecture and laboratory setting.

PHT 3202C Basic Therapeutic Skills II (4)(W)
A study of the physiological rationale for the use of the electrophysiological modalities, by physical therapists, performed in a lecture and laboratory setting.

PHT 3231 Rehabilitation (3)(SS)
A study of functional evaluation and interpretation, treatment program planning, and total treatment of the severely physically disabled, including cardiac and pulmonary rehabilitation programs.

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PHT 3232C Prosthetics and Orthotics (3)(SS)
A presentation of the biomechanics, anatomy, and appliances necessary to the evaluation, prescription, fabrication and use of prosthetic and orthotic devices.

PHT 3300 Physical Therapy and Human Disorders (4)(S)
Lectures and media presentations related to human disorders typically seen within the practice of physical therapy.

PHT 3310 Orthopedic Surgery (4)(SS)
Multimedia lectures and patient case studies presented by physicians, covering evaluation and (surgical and non-surgical) management of orthopedic patients.

PHT 3311 Clinical Orthopedics (3)(SS)
Correlated with Orthopedic Surgery (PHT 3310): applications of physical therapy evaluation, treatment and management procedures for patients referred to physical therapists by physicians.

PHT 3400 Emotional Aspects of Physical Disability (2)
Examines attitudes of physical therapists toward disability; emotional reactions of patients to their own disability; and emotional disorders common to patients treated by physical therapists.

PHT 3812 Clinical Clerkship II (3)(SS)
Extension of PHT 3801.

PHT 4141 Evaluation of the Developing Child (3)(F)
A study of the neuromuscular development characteristics of the child; information necessary as prerequisite to Neurophysiologic Techniques (PHT 4234C).

PHT 4234C Neurophysiologic Techniques (6)(W)
A study and application of the exercise techniques of Bobath, Rood, Brunnstrom, Knott and Voss to the treatment of children and adults with neurophysiologic deficits.

PHT 4235C Electrodiagnosis (3)(F)
A study of electromyography and other electrical testing procedures for neuromuscular disorders; also, a study of basic acupuncture, transcutaneous stimulation, and biofeedback.

PHT 4312 Neurology (3)(F)
Taught by community neurologists, the course covers the evaluation and investigation of neurological disorders typically seen by a physical therapist.

PHT 4313 Clinical Neurology (2)(F)
Correlated with Neurology (PHT 4312): applications of physical therapy evaluation, treatment and management procedures for patients referred to physical therapists by physicians.

PHT 4510 Organization and Administration (5)(S)
A study in management of physical therapy delivery systems and current health trends affecting the profession of physical therapy.

PHT 4822 Clinical Clerkships III (3)(F)
Extension of PHT 3801.

PHT 4823 Clinical Clerkships IV (3)(W)
Extension of PHT 4822.

PHT 4824 Clinical Internship (3)(SS)
Extension of PHT 4825.

PHT 4825 Clinical Internship II (12)(S)
Supervised full-time clinical experience, designed to afford the student the opportunity to gain experience in total care of patients, in the administration and supervision of a physical therapy department, and in his chosen area of specialization.

PHT 4905 Independent Study (1–6)(S,SS,F)
(By permission of physical therapy faculty). The student will select a particular aspect of physical therapy or a related field for in-depth independent study.

PHT 4932 Research Methods and Design (2)(W)
An introduction to research theory and methods, collection and analysis of data, and methods of presentation and interpretation, as they apply to physical therapy.

Faculty

School of Technology

Dean **Lambert Tall**
Assistant Dean **Katharine R. Curry**
Chairpersons:
Construction **Jack L. Clark**
Dietetics and Nutrition **Penelope Easton**
Engineering Technology **James R. Story**
Home Economics **Betty Morrow**
Industrial Systems **Gabriel Aurioles**
Medical Technology **Margaret E. Waid, M.D.**
Occupational Therapy **Reba Anderson**
Physical Therapy **Roger Skovly**
Program Directors:
Communications Technology **James Couch**
Medical Records Administration **Florence Amato**

Faculty

Alcorta, Sergio J., Ph.D., P.E., *(University of Miami), Associate Professor, Engineering Technology*
Amato, Florence C., Ph.D., R.R.A., *(St. Louis University), Associate Professor and Program Director, Medical Records Administration*
Anderson, Reba L., M.A., O.T.R., *(University of Florida), Chairperson and Associate Professor, Occupational Therapy*
Assalone, Frances R., B.S., *(Florida International University), Visiting Instructor, Communications Technology*
Aurioles, Gabriel, Ed.D., *(Florida Atlantic University) Chairperson, Industrial Systems*
Bassett, William C., B.S., *(Rhode Island School of Design), Visiting Instructor, Construction*
Bergman, Karen, M.S., O.T.R., *(Baylor University), Assistant Professor, Occupational Therapy*
Canaves, Jaime, M.A., R.A., *(University of Florida), Assistant Professor, Construction*
Carter, Shirley, M.H.S., O.T.R., *(University of Florida), Assistant Professor, Occupational Therapy*
Cereijo, Manuel R., M.S., P.E., *(Georgia Institute of Technology), Associate Professor, Electrical Engineering Technology*
Chaudhari, Bhaskar S., Ph.D., P.E. *(University of Pennsylvania), Associate Professor, Construction*
Clark, Jack L., Ph.D., *(Laurence University), Chairperson and Professor, Construction*
Couch, James E., M.S., *(Florida State University), Program Director and Associate Professor, Communications Technology*
Curry, Katharine R., Ph.D., R.D., *(Southern Illinois University), Assistant Dean and Associate Professor, School of Technology*

(Continued)

DeGroot, Sybil, Ph.D., *(Ohio State University), Associate Professor, Industrial Systems*

Dudley, Suze, M.S., O.T.R., L.O.T. *(Florida International University), Assistant Professor, Occupational Therapy*

Dunevitz, Burton J., M.S., R.P.T., *(University of Nebraska), Associate Professor, Physical Therapy*

Easton, Penelope S., Ph.D., R.D., *(Southern Illinois University), Professor and Chairperson, Dietetics and Nutrition*

Enrione, Evelyn, M.S., R.D., *(Florida International University), Visiting Instructor, Dietetics and Nutrition*

Fairbanks, Jesse R., Ph.D., *(Ohio State University), Associate Professor, Industrial Systems*

Glidden, Helen B., M.Ed., R.R.A., *(Boston College), Assistant Professor, Medical Records Administration*

Hahs, Jimmy Dean D., D.E., P.E., *(University of Oklahoma), Associate Professor, Engineering Technology*

Haskins, Awilda R., M.S. *(State University of New York at Buffalo), Assistant Professor, Physical Therapy*

Higgins, Terry W., M.S., R.P.T., *(Medical College of Virginia), Assistant Professor, Physical Therapy*

Himburg, Susan P., Ph.D., R.D., *(University of Miami), Assistant Professor, Dietetics and Nutrition*

Hout-Cooper, Neil M., Ph.D., *(Florida Atlantic University), Assistant Professor, Industrial Systems*

Howard, Greta, M.Sc., *(Florida International University), Instructor, Home Economics*

Judge, Robert M., Ph.D., *(University of Arizona), Assistant Professor, Engineering Technology*

Katz, Eric S., M.S., *(Florida State University), Assistant Professor, Communications Technology*

Khan, Abdur Rasheed, Ph.D., R.D., *(Kansas State University), Assistant Professor, Dietetics and Nutrition*

Kruse, Barbara S., M.P.H., R.D., *(University of California at Berkeley), Visiting Instructor, Dietetics and Nutrition*

Leonard, Rene J., D.Sc. *(University of Miami), Associate Professor, Engineering Technology*

Llevada, Evodio, Ph.D., *(University of Miami), Assistant Professor, Industrial Systems*

Majzub, Iraj E., D. Arch., *(University of Torino), R.A., Professor, Construction*

Meszaros, Hedvika, M. Arch. Engr., *(Czech University of Technology in Prague), R.A., Assistant Professor, Construction*

Morrow, Betty, Ph.D., *(University of Miami), Chairperson and Assistant Professor*

Myers, Susan J., M.S., *(Florida State University), M.S.M., (Florida International University), R.D., Assistant Professor, Dietetics and Nutrition*

Ogle, Florence B., M.S., *(Indiana State University), Associate Professor, Home Economics*

Otazo, Julio O., M.A. Arch., *(University of Florida), R.A., Assistant Professor, Construction*

Pierce, Gerard J., M.A., *(California State College), Associate Professor, Construction*

Remington, John, Ph.D., *(University of Michigan), Assistant Professor, Industrial Systems*

Robinson, Joyce T., M.S., M.T., (ASCP), *(Pepperdine University), Assistant Professor, Medical Technology*

Seedarnee, Frank A., M.Sc., F.I.M.L.S., *(Brunel University), Assistant Professor, Medical Technology*

Skovly, Roger C., M.S., R.P.T., *(University of Iowa), Associate Professor and Chairperson, Physical Therapy*

Smith, Adele, M.S., *(Auburn University), Assistant Professor, Home Economics*

Smith, Sylvia L., M.S., S.M., (AAM), S.M. (ASCP), *(University of Miami), Associate Professor, Medical Technology*

Storm, Penelope, Ph.D., *(University of Maryland), Assistant Professor, Home Economics*

Story, James R., Ph.D., *(University of Alabama), Chairperson and Associate Professor, Engineering Technology*

Subbarao, Wunnava V., Ph.D., *(Andhra University), Associate Professor, Engineering Technology*

Tall, Lambert, Ph.D., *(Lehigh University), Professor and Dean, School of Technology*

Thompson, LeRoy E., Ph.D., P.E., *(Rice University), Professor, Engineering Technology*

Ural, Oktay, Ph.D., P.E., *(North Carolina State University), Coordinator and Director, Professor, Construction*

Villar, Juan, M.S., *(Georgia Institute of Technology), Assistant Professor, Engineering Technology*

Villate, Jose T., Ph.D., *(University of Wisconsin), P.E., Associate Professor, Engineering Technology*

Waid, Margaret E., M.D., M.T., (ASCP), *(University of Michigan), Professor and Chairperson, Medical Technology*

Wallace, Donald F., Ph.D., P.E., *(University of Missouri), Associate Professor, Industrial Systems*

Zins, Janet L., M.S., M.T., (ASCP), *(University of Cincinnati), Associate Professor, Medical Technology*

Military Programs

Air Force ROTC

Florida International University, in cooperation with the University of Miami, offers Air Force ROTC to full-time students through an enrollment agreement between the two institutions. All classes and leadership labs are taught on the University of Miami campus. Questions regarding the Air Force ROTC program should be directed to the Department of Aerospace Studies at the University of Miami, 284–2870.

LOWER DIVISION PREPARATION:

Required Courses: Aerospace Studies 1000 and 2000 (see remarks), 4 semesters credit.

Remarks: Lower division requirements may be waived if the student (1) is a veteran, or (2) is selected for a two-year (upper division only) program and attends a six-week preparatory camp before enrolling in AFR 3201C.

UPPER DIVISION PROGRAM:

Required Courses: AFR 3201C, 3210C
AFR 4220, 4230C

Remarks: The upper division program is designed to prepare interested and qualified students for commissioning as officers in the U.S. Air Force upon graduation. Students are furnished uniforms and textbooks and receive $100.00 per month during the academic year.

Army ROTC Program

Florida International's Army ROTC Program is offered through a cross-enrollment agreement with the University of Miami. The classroom portion of the courses are taught at Florida International one day each week. Any questions should be referred to the Military Science Department at the University of Miami.

LOWER DIVISION PREPARATION:

Required Courses: Military Science I and II (See remarks).

Remarks: The lower division requirements may be waived if the student (1) is a veteran or (2) attends a basic camp prior to entering MIS 3423.

UPPER DIVISION PROGRAM:

Required Courses: MIS 3423, 3310
MIS 4120, 4410

Remarks: The program is designed to select interested and qualified individuals for entry into the U.S. Army on an active duty or reserve status.

Marine Officer Programs

Qualified students may apply for an officer program leading to a commission as a Second Lieutenant in the United States Marine Corps. Commissions are offered in both ground and aviation components. The Platoon Leaders Course (PLC) is offered to freshmen, sophomores and juniors who attend precommissioning training during the summer. Financial assistance and Flight Indoctrination Programs are available. Qualified seniors attend twelve weeks of training in the Officer Candidate Course (OCC) after graduation. For details, contact the Career Development and Placement Office, or the Marine Officer Selection Officer when he is on campus.

Course Descriptions

AIR FORCE ROTC

AFR 3201 Principles of USAF Leadership and Management (5)(F)
Professionalism; responsibilities; the Military Justice System; leadership theory and practices; management tools, principles, practice; problem solving.

AFR 3210 Principles of USAF Leadership and Management (5)(W)
Continuation of AFR 3201.

AFR 4220 National Security Forces In Contemporary American Society (5)(F)
Principal requisites for maintaining adequate national security forces. Functional processes and institutional structure involved in the formulation and implementation of U.S. defense policy.

AFR 4230 National Security Forces In Contemporary American Society (5)(W)
Political, economic and social constraints affecting the formulation of U.S. defense policy. The impact of both technological and international developments upon strategic preparedness and the overall defense policy-making process.

ARMY ROTC

MIS 3423 Military Leadership and Motivation (5) (Advanced MS II)
A behavioral science approach to military leadership and motivation, with emphasis on crisis-oriented organizations.

MIS 3310 Advanced Military III (5)
Applied tactics; principles and fundmentals of tactical operations. Advanced leadership.

MIS 4120 Advanced Military Science IV (5)
World power relationships: world change and military implications. Applied leadership. Military administration and justice.

MIS 4410 Advanced Military Science IV (5)
Theory and dynamics of the military team. Applied leadership.

Academic/Career

A

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ACADEMIC CALENDAR, 1980
FLORIDA INTERNATIONAL UNIVERSITY

SPRING QUARTER 1980

February 8	Last Day for Receipt of Admissions Application for International Students Applying to the Spring Quarter
February 18–22	Official Registration Week for the Spring Quarter
March 10	Last Day for Receipt of Applications (Including Appropriate Credentials) for Regular Admissions to Spring Quarter
March 31	Registration Day
April 1	Classes Begin
	Drop and Add Period Begins
April 7	Last Day to Complete Late Registration
	Drop and Add Period Ends
	Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability
	Last Day to Pay Fees Without a $50.00 Late Fee
	Last Day to Pay Fees to Avoid Cancellation of Enrollment
April 21	Last Day to Apply for Spring Quarter Graduation
April 28	Last Day to Reinstate Cancelled Enrollments
May 12–16	Official Registration Week for the Summer Quarter
May 12	Last Day to Drop a Course With a Grade of DR
	Last Day to Withdraw from the University with a WI Grade
May 26	Memorial Day Holiday (University Closed)
June 13	Classes End
June 14	Official Commencement Exercises

SUMMER QUARTER 1980

March 24	Last Day for Receipt of Admissions Application for International Students Applying to the Summer Quarter
May 12–16	Official Registration Week for the Summer Quarter
June 2	Last Day for Receipt of Applications (Including Appropriate Credentials) for Regular Admissions to Summer Quarter
June 23	Registration Day
June 24	Classes Begin
	Drop and Add Period Begins
June 30	Last Day to Complete Late Registration
	Drop and Add Period Ends
	Last Day to Drop Courses or Withdraw from the University Without Incurring a Financial Liability
	Last Day to Pay Fees Without a $50.00 Late Fee
	Last Day to Pay Fees to Avoid Cancellation of Enrollment
July 4	Independence Day Holiday (University Closed)
July 14	Last Day to Apply for Summer Quarter Graduation
July 21	Last Day to Reinstate Cancelled Enrollments
August 4–8	Official Registration Week for the Fall Quarter
August 4	Last Day to Drop a Course with a Grade of DR
	Last Day to Withdraw from the University with a WI Grade
August 29	Classes End

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